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REPORT ON THE OBSERVANCE OF STANDARDS AND CODES—DATA MODULE

December 2021

This Report on the Observance of Standards and Codes—Data Module for Mexico was prepared by a staff team of the International Monetary Fund as background documentation for the periodic consultation with the member country. It is based on the information available at the time it was completed June 2021. The views expressed in this document are those of the staff team and do not necessarily reflect the views of the government of Mexico or the Executive Board of the IMF.

The Response by the Authorities to this report and the Detailed Assessments Using the Data Quality Assessment Framework (DQAF) are also included.

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REPORT ON THE OBSERVANCE OF STANDARDS AND CODES—DATA MODULE VOLUME I

December 8, 2021

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This report is based on information provided prior to and during a mission conducted during June 7-21, 2021 as well as on a survey of users and publicly available information. The mission team was led by Mr. James W. Tebrake (Assistant Director, IMF Statistics Department) and also comprised Mr. Ethan Wiseman (Expert, Government Finance Statistics), Mr. Eduardo Rodriguez (Expert, Balance of Payments-International Investment Position), Ms. Lisbeth Rivas (Senior Economist (IMF), and Expert, National Accounts).

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Glossary

1993 SNA	*System of National Accounts, 1993*
2008 SNA	*System of National Accounts, 2008*
BI	Benchmark to Indicator Ratio
BM	Bank of Mexico
BOP	Balance of payments
BPM5	*Balance of Payments Manual, fifth edition*
BMP6	*Balance of Payments and International Investment Position Manual, sixth edition*
CGT	General Conditions of Employment of the Bank of Mexico
CNBV	National Banking and Securities Commission
COFOG	Classification of Functions of Government
COICOP	Classification of Individual Consumption by Purpose
DSBB	Dissemination Standards Bulletin Board
DQAF	Data Quality Assessment Framework
EDS Guide	External Debt Statistics, Guide for Compilers and Users, 2013
ESS	External Sector Statistics
GFS	Government Finance Statistics
GFSM 1986	*A Manual on Government Finance Statistics, 1986*
GFSM 2001	*Government Finance Statistics Manual, 2001*
IIP	International investment position
INEGI	National Institute of Statistics and Geography
ISIC	*International Standard Industrial Classification of All Economic Activities*
LSNIEG	Law of the National System of Information on Statistics and Geography
MFSM 2000	*Monetary and Financial Statistics Manual 2000*
NA	National accounts
NAICS	North American Industry Classification System
ODC	Other depository corporations
ROSC	Report on the Observance of Standards and Codes
SDDS	Special Data Dissemination Standard
SHCP	Secretariat of Finance and Public Credit
SNIEG	National System of Statistics and Geographic Information

OVERALL ASSESSMENT

1. **This Report on the Observance of Standards and Codes—Data Module (Data ROSC) updates assessments conducted in 2010 and 2015.** The updated assessments are based on the May 2012 version of the IMF's Data Quality Assessment Framework (DQAF) and cover the national accounts, government finance, and external sector statistics. The National Institute of Statistics and Geography (INEGI) is responsible for the national accounts, the Secretariat of Finance and Public Credit (SHCP) for the government finance statistics (except for data on state and local governments, which are the responsibility of INEGI), and the Bank of Mexico (BM) for the external sector statistics.

2. **The macroeconomic statistics are generally of high quality, although there is some variation across datasets (Table 1).** The mission found a high degree of quality awareness, professionalism, cooperation, and integrity in statistical production. Data publication practices are good, as Mexico has been a subscriber of the Special Data Dissemination Standard (SDDS) since August 1996, posting its metadata on the Fund's *Dissemination Standards Bulletin Board* (*DSBB*) starting in March 1998. Mexico is in observance of the SDDS, meeting specifications for data coverage, periodicity, and timeliness, while complying with an advance release calendar. Data publication performance appears within reach of the more stringent requirements of the SDDS Plus established in 2012 (Appendix I compares current dissemination practices with SDDS Plus requirements).

3. **The macroeconomic statistics programs are well-developed, attaining significant advances in governance, quality, and process over the last five years.** Most notably, the Law of the National System of Information on Statistics and Geography (LSNIEG) was passed in 2008, and over the last several years the statistical system has been able to leverage the full advantages of this improved legal framework. At present, the workings of the statistical system appear efficient and mature, as INEGI coordinates the system of statistics and geographic information (SNIEG), with oversight by a National Statistical Council and the support of a National Advisory Committee. The mission's recommendations aim at further strengthening the SNIEG, its statistical operations, and the quality and consistency of the national accounts, external sector and fiscal statistics.

4. **There is some variation across statistical domains with respect to the pace of improvements achieved since 2010 and 2015.** While the benchmark year of the national accounts was updated to 2013, work is underway to update the benchmarks to 2018 by 2022. INEGI also has standardized its statistical business processes resulting in efficiency and quality gains. Early in 2015, the Bank of Mexico launched a project to adopt the *Balance of Payments and International Investment Position Manual, Sixth Edition (BPM6)*. And in 2017 it began publishing BPM6-based data on the Balance of Payments for the period 2006-the present and IIP for 2002-the present (annual data; and for 2009-present, quarterly information). The SHCP began publishing, in April 2021, annual fiscal statistics in closer alignment to the *Government Finance Statistics Manual 2014* (*GFSM 2014*), and in June 2021 disseminated quarterly general government statistics beginning with the first quarter of 2021.

5. **While substantial progress has been made, there is some scope for further improvement.** There is a need for greater consistency across datasets, and for regular reconciliation exercises that should be published. In particular, the publication of reconciliation tables would enhance the usefulness of the macroeconomics statistics, and inter-dataset consistency could be enhanced through increased data sharing across organizations. Users' understanding of the fiscal data could be enhanced by publishing a complete list of public sector institutional units, identifying the institutional sector assigned to each unit, and indicating which units are in scope for each of the fiscal, national accounts, and external sector statistics.

6. **Based on the DQAF, the remainder of this section summarizes the mission's main findings,** which are presented for each agency for the first two dimensions of quality, and across datasets for the remaining four.

7. **Mexico has sufficient prerequisites of quality and assurances of integrity in place to ensure users are provided with high quality data**. The LSNIEG establishes that INEGI has the exclusive responsibility for integrating the national accounts (Article 59); has legal backing to collect information for the national accounts (Article 45 (1)); and must promote strict data confidentiality (Article 37). Further, Article 26 of the Constitution grants INEGI technical and operating autonomy. Resources are adequate, with various advisory committees established to advice INEGI regarding program relevance. INEGI firmly adheres to the principle of objectivity in the collection, processing, and dissemination of statistics, demonstrating professionalism and transparency in policies and practices, and providing guidelines to staff on ethical conduct. INEGI's autonomy guarantees that no government authority has access to its statistics before official release. For key economic indicators INEGI establishes a fixed release date and time, publishes an advance release calendar, and ensures that all users are granted simultaneous access.

8. **The Federal Budget and Fiscal Responsibility Law and other laws clearly establish that fiscal statistics on the central government** and certain other levels of the public sector are to be compiled and disseminated by the SHCP, while INEGI is responsible for compiling and disseminating data on the operations of state and municipal (local) governments. The government accounting standards and associated catalogs are established by the National Council for Accounting Harmonization (CONAC). These standards are established in close collaboration with the SHCP and state and municipal governments, while public enterprises follow national accounting standards for corporations. Once established, all government entities are required to implement the standards to facilitate uniform reporting across all levels of government. However, universal implementation is yet to be completed. Confidentiality of data is protected, and statisticians are free from political influence in the choice of the most appropriate data sources and methods. Resources are adequate for current tasks, and there is awareness that quality is the key for maintaining public confidence in the statistics, with the laws, regulations, methodologies, and manuals governing compilation and dissemination of statistics available to the public on the SHCP website. Fiscal statistics are released simultaneously to Congress and to the public through the SHCP website.

9. **The responsibility for compiling macroeconomic statistics by the Bank of Mexico (BM) is broadly stated in Article 62 Section I of the Bank of Mexico Law (1994) that indicates that**

the BM, in coordination with the other relevant authorities, may prepare, compile, and publish economic and financial statistics, as well as operate information systems based on these statistics, and collect the necessary data for these purposes. The BM also is granted authority to collect and compile macroeconomic statistics under the LSNIEG. As the Balance of Payments/IIP and External Debt Statistics have not yet been identified as statistics of national interest, the BM collects data under the Bank of Mexico Law and cannot mandate nonfinancial corporations to provide information. Instead, the BM relies on the goodwill of nonfinancial corporation respondents to voluntarily complete BM surveys and other reporting forms. This impacts the overall accuracy of the statistics due to lower response rates, as compared to similar surveys run by INEGI, and late reporting. Resources dedicated to statistical production are adequate and high ethical standards are set for staff. Data collected for statistical purposes are not shared with other departments within the BM (i.e., cannot be used for regulatory purposes). While the BM does not conduct regular meetings with outside users, it has well-established procedures to monitor data quality.

10. **The methodological foundations of the statistics are generally sound, with some variation across datasets.** The national accounts generally follow the conceptual advice in the *System of National Accounts, 2008 (2008 SNA)*. Preparation of the balance of payments and international investment position reflect the recommendations of the *BPM6*. The BM has not yet implemented the recommendations of the *External Debt Statistics, Guide for Compilers and Users, 2013* (*EDS Guide*) for gross external debt. In particular, the external intercompany debt and SDR allocations are not included in the external debt disseminated by BM, with the market value limited to the liabilities of deposit-taking corporations, excluding the central bank. The application of the accrual principle in the balance of payments is yet to be extended to the recording of interest of public sector debt.

11. **The SHCP compiles and disseminates two presentations of fiscal statistics.** A national traditional presentation is prepared for use by domestic policymakers and the public. This presentation has a long history and is widely used to monitor government operations and public debt. The SCHP also prepares fiscal data broadly reflecting the *Manual on Government Finance Statistics, 2014 (GFSM 2014)*, including for re-dissemination in the IMF's Government Finance Statistics Yearbook. While the source data used for both presentations are the same, differences in the classification of transactions and coverage of institutional units make it difficult for users to reconcile the different presentations. Gross domestic debt is recorded at face value, except in the case of treasury bills [*CETES*], which are recorded at discount value. Gross external debt also is recorded at face value. The classification of financing and debt as domestic or foreign is guided by place of issue of the liabilities rather than the residency criterion. The same financing and debt data are used as source data for the external sector statistics.

12. **Classification in the international presentation of fiscal statistics follows the framework of the GFSM 2014**. However, detailed tables are not provided for the classification of revenue, the economic classification of expense, transactions by instruments in nonfinancial assets, financial assets and liabilities, or the transactions of financial assets and liabilities classified by sector of the counterparty to those financial instruments. In addition, other classifications that do not follow the

GFSM 2014 include: 1) the possible absence of the recording of equity transactions for certain public corporations; and 2) the recording of accounts receivable and accounts payable. Currently, accounts receivable and accounts payable represent the reconciliation differences between stocks and flows for debt instruments and not actual accounts receivable and payable as found on financial statements.

13. **The accuracy and reliability of the data are generally adequate and have improved since 2010 and 2015.** In the national accounts, the quality of the source data is high, owing to a well-developed quinquennial economic census and an extensive annual and monthly business survey program. The statistical techniques are sound and statistical outputs sufficiently portray reality. Currently, INEGI uses fixed base year weights to calculate constant price estimates of GDP. The *2008 SNA* suggests the use of chain weighting when producing estimates of the volume of GDP and its sub-components. Use of fixed weights when calculating the volume of GDP could introduce bias in the estimates, especially when the economy undergoes significant structural change.

14. **The source data for BOP statistics are obtained from comprehensive data collection programs and extensive use of administrative data.** Over several years, the BM has been able to address a number of data gaps related to the incomplete coverage of the nonfinancial private sector, in both the current and financial accounts, particularly services,[1] and financial transactions, including trade credits and financial derivatives.

15. **While the information necessary for compiling fiscal data (in both the national and *GFSM 2014* presentations) for the various levels of government is available,** timeliness is problematic for data on local governments. There have been notable timeliness improvements in the availability of **annual** data on state and municipal government in recent years, specifically the collection of data from municipalities. Information for an average of 1,100 municipalities (representing 80 percent of municipal revenue) is available within nine months of the reference period, however overall publication of state and municipal government data still exceeds nine months after the reference period. This complicates timely monitoring of fiscal trends in the general government and the public sector as a whole.

16. **While the serviceability of data has improved since 2010 and 2015 and meeting SDDS Plus requirements may be within reach, improvements are still needed in two areas.** First, there is scope to improve consistency across datasets. Systematic reconciliation of data should be conducted on a regular schedule, with results published to keep users apprised of remaining issues. Second, there is a general need to provide more information to users with respect to revisions. As most data are available with adequate periodicity and timeliness exceeding SDDS requirements in some cases, Mexico appears a good candidate to work towards adherence to the IMF's SDDS Plus.

17. **Accessibility of the data has improved substantially since 2015, with the BM and INEGI modernizing their dissemination platforms.** Data are available in a variety of formats using the latest technologies. For example, the BM and INEGI have developed Application Programming Interfaces (APIs) that allow users to extract data directly from databases, and issue press releases

[1] There is inter-agency work ongoing to improve the coverage of services.

when releasing the national accounts and the balance of payments. However, the BM does not issue a press release when releasing the IIP and external debt, which may result in the underutilization of the IIP statistics. The modernization of INEGI's website greatly improved access to data and metadata. The metadata for each INEGI product is presented alongside the data, improving the overall interpretability of the data. However, for certain products the level of detail on sources and methods could be improved. The BM also provides users with access to metadata, but both the access to and the quality of the metadata could be improved. The mission found the SHCP website difficult to navigate and the fiscal statistics often difficult to interpret, especially in comparison to the users' experience with the INEGI and BM websites. The SHCP should build on international best practices to enhance users' access and experience.

18. **Section II provides a summary assessment by agency and dataset based on a four-part scale. This is followed by staff recommendations in Section III.** Practices compared to the SDDS Plus requirements are summarized in Appendix I. The authorities' response to this report and the detailed assessments are presented in volumes II and III, respectively.

ASSESSMENT BY AGENCY AND DATASET

19. **Assessments for the three macroeconomic datasets—national accounts, government finance, and external sector statistics—were conducted using the DQAF-May 2012.** The results are presented at the level of the DQAF elements using a four-point rating scale (Table 1). Assessments of the prerequisites of data quality and the assurances of integrity (Dimensions "0" and "1") are presented in Tables 2a–c. For each dataset, the assessment of methodological soundness, accuracy and reliability, serviceability, and accessibility (Dimensions "2" to "5") are shown in Tables 3a–c.

Table 1. Mexico: Data Quality Assessment Framework—Summary Results

Key to symbols: O = Observed; LO = Largely Observed; LNO = Largely Not Observed; NO = Not Observed; NA = Not Applicable[1]

Dimensions/Elements \ Datasets	National Accounts	Government Finance Statistics	Balance of Payments Statistics, International Investment Position and External Debt Statistics
0. Prerequisites of quality			
0.1 Legal and institutional environment	O	O	LO
0.2 Resources	O	O	O
0.3 Relevance	O	O	LO
0.4 Other quality management	O	O	O
1. Assurances of integrity			
1.1 Institutional Integrity	O	O	O
1.2 Transparency	O	O	O
1.3 Ethical standards	O	O	O
2. Methodological soundness			
2.1 Concepts and definitions	O	LO	LO
2.2 Scope	O	LO	O
2.3 Classification/sectorization	O	LNO	LO
2.4 Basis for recording	LO	LO	LO
3. Accuracy and reliability			
3.1 Source data	O	O	LO
3.2 Assessment of source data	O	O	O
3.3 Statistical techniques	LO	O	O
3.4 Assessment and validation of intermediate data and statistical outputs	O	O	O
3.5 Revision studies	O	O	LO
4. Serviceability			
4.1 Periodicity and timeliness	O	O	O
4.2 Consistency	LO	LO	LO
4.3 Revision policy and practice	LO	LNO	LO
5. Accessibility			
5.1 Data accessibility	O	LO	LO
5.2 Metadata accessibility	LO	O	LO
5.3 Assistance to users	O	O	O

[1]**Observed:** Current practices generally meet internationally accepted statistical standards without any significant deficiency. **Largely observed:** There are some departures, but these are not seen as sufficient to raise doubts about the broad observance of standards. **Largely not observed:** Current practices deviate significantly from standards, and major remedial action is required. **Not observed:** Most current practices deviate from standards. **Not applicable:** Used only exceptionally when standards do not apply to a country's circumstances.

Table 2a. Mexico: Assessment of Data Quality—Dimensions 0 and 1—National Institute of Statistics and Geography	
0. Prerequisites of quality	**1. Assurances of integrity**
Legal and institutional environment. According to Article 26 of the Constitution, INEGI is a public institution with technical and managerial autonomy. Under the law (LSNIEG) published in April 2008, INEGI has exclusive responsibility for conducting the national census and integrating the system of national accounts (Article 59). INEGI coordinates the newly established SNIEG, which includes a National Advisory Council and committees by type of statistics. This supports inter-institutional coordination, with timely flow of source data among agencies. There are pre-established calendars for the provision of data from surveys and censuses, which are strictly observed. Confidentiality of individual data is guaranteed by the Second Title, Chapter V of the LSNIEG and by the Federal Law of Administrative Responsibilities of the Public Servants (March 2002). The legal power of INEGI for compiling statistics is clearly set out in Chapter V of the LSNIEG, which refers to the rights and obligations of users and respondents. Article 45 (1) states that "system respondents are obliged to provide accurate and timely data and reports as and when requested…." The Law also provides penalties for refusing data requests or falsifying information. **Resources.** The human and financial resources allocated to national accounts (NA) are commensuratewith INEGI's institutional program objectives. Staff attends training courses offered by international organizations. Computing resources, physical infrastructure, and funding are adequate. INEGI seeks to take advantage of modern information technology for the compilation of NA. **Relevance.** INEGI consults users, including when changing the base year. There is a portal on the INEGI website that provides a permanently open communication channel to users for consultation on methodology and conceptual issues. INEGI staff and management are updated on developments in NA methodology and compilation techniques through participation in international fora. **Other quality management.** Article 3 of the LSNIEG states that the INEGI has the objective of providing to society and to the state quality information that is relevant, trustful and timely, in order to support national development. The SNIEG envisages the design of strategic programs (long-term), national programs (five5 years), and annual programs in order to improve and broaden statistical products as well as implement international standards. INEGI seeks expert advice for improving statistics, and quality standards are designed to enhance efficiency in the use of resources.	**Institutional Integrity.** Professional competence is the basic principle for recruitment and promotions of staff. The choice of sources and methods is solely based on statistical considerations. INEGI prepares press notes stating its position when errors of interpretation are detected, making these notes available to the broad public by means of the webpage of the Institute. **Transparency.** Press releases indicate that published data are compiled under the responsibility of INEGI and in accordance with the LSNIEG. The autonomy conferred to the INEGI guarantees that no government authority has access to the statistics before release. A note is sent to the Presidency of the Republic the same day of the release (but only after the data are released). The data are published in a press release with the logo of the INEGI. When there is a change in the base year of the NA, the most recent methodological standards are adopted. Any substantial modification in source data and/or methodology is publicized in advance. **Ethical standards.** The conduct of INEGI's staff is subject to the norms and sanctions established by the Federal Law on Administrative Responsibilities of the Public Servants as well as INEGI's ethical code issued under article 7 of LSNIEG.

Table 2b. Mexico: Assessment of Data Quality—Dimensions 0 and 1—Secretariat of Finance and Public Credit

0. Prerequisites of quality	1. Assurances of integrity
Legal and institutional environment. The Federal Budget and Fiscal Responsibility Law and other laws assign to the SHCP the obligation to provide Congress monthly and quarterly reports on the public finances and debt. Within the SHCP, the General Directorate of Public Finance Statistics is responsible for fiscal statistics on revenue, expenditure, and financing, while the Debt Statistics Department is responsible for debt statistics. INEGI is responsible for compiling and disseminating fiscal statistics on state and local governments. The confidentiality of data reported by respondents is protected by law. For the federal public sector and parastatal entities there are legal and administrative provisions for collecting information necessary for compiling fiscal statistics. **Resources.** The human resources assigned to compile fiscal statistics are adequate to perform current tasks. Training on methodological matters is mainly internal, complemented by IMF courses. Physical facilities are adequate and computer hardware and other modern technologies are available to facilitate the timely compilation and dissemination of quality fiscal statistics. Funding is reasonably secure for the identified needs of the statistical program, while budgeting procedures allow cost control and adequate allocation of resources. **Relevance.** Fiscal statistics follow the budget cycle and are used to prepare and monitor the budget, and the public finances broadly defined. The timeliness and level of detail provided by the statistics allow users to assess fiscal performance. Periodic meetings with users take place, including through meetings coordinated by the SHCP Investor Relations Office. INEGI, through its Committee for Quality Assurance (CoAC), carries out an analysis the EFIPEM report on state and local governments for relevance. **Other quality management.** The SHCP has been working for several years to improve data coverage and timeliness. The broader fiscal indicator, the financial requirements of the public sector, is now a fiscal anchor. Work is under way to strengthen the financial information system and the National Council for Accounting Harmonization (CONAC) has established accounting standards and accounting systems underlying financial and budgetary information. INEGI, through its CoAC, implemented the Generic Statistical Business Process Model (GSBPM) which describes in detail the activities carried out to produce standardized statistical and geographic information.	**Institutional Integrity.** Article 26 of the Constitution grants INEGI technical and operating autonomy and the Federal Public Servants Responsibility Law protects civil servants against illegal orders. Fiscal statistics are compiled based on accounting records from the accounting centers and administrative records, which follow charts of accounts and budgetary rules derived from the legal framework. Statisticians are free of political influence in the choice of data sources and methods to compile statistics. Dissemination is based solely on statistical considerations and generally follows international dissemination standards. The Press Office monitors the use of fiscal statistics and makes the necessary clarifications to avoid misinterpretation. **Transparency.** The laws, regulations, and methodologies that govern the compilation and dissemination of statistics are available to the public on the SHCP website. Fiscal statistics are released simultaneously to the public. The tables disseminated by the SHCP identify the department responsible for their compilation. Methodological changes are usually described in the draft Expenditure Budget of the Federation and in the General Economic Policy Criteria for the relevant year. Methodological notes are available on the SHCP website. **Ethical standards.** INEGI has issued a code of ethics that sets the standards of behavior for all staff undertaking statistical and geographic activities, and it is available to the public on the INEGI website. The Federal Law on the Responsibility of Public Servants spells out behavioral duties for civil servants. Failure to comply may result in prosecution and sanctions, including dismissal.

Table 2c. Mexico Assessment of Data Quality—Dimensions 0 and 1—Bank of Mexico

0. Prerequisites of quality	1. Assurances of integrity
Legal and institutional environment. The BM compiles the monetary and external sector statistics. A 1952 Presidential Decree establishes that the BM is the sole agency with the faculty to send information to the IMF. However, the BM Law, which became effective April 1, 1994, does not specifically assign responsibility for the balance of payments statistics or any other external sector statistics to the BM. However, Article 62.I of the Law indicates that the BM, in coordination with the other authorities, may prepare, compile, and publish economic and financial statistics, as well as operate information systems based on these statistics, and collect the necessary data for these purposes. Article 36 stipulates that financial corporations are obliged to provide the BM with the information it requires regarding their operations in order to fulfill its functions appropriately; but the BM is not empowered by the Law to require reporting by the nonfinancial private sector (except for firms involved in the business of personal money transfers). Confidentiality of the reported data and limiting use for statistical purposes are adequately guaranteed by legislation. The General Conditions of Employment of the BM (CGT) establish that revealing operating secrets or confidential BM matters is grounds for dismissal, without the BM incurring any liability. Likewise, the BM Ethical Code establishes similar confidentiality norms. **Resources.** The financial, computing, and staff resources are adequate to compile the external sector statistics (ESS). Every effort is made to use the most advanced information technology available for data processing and dissemination. **Relevance.** Under the Transparency and Access to Public Information Federal Law, the BM keeps records on users' questions and expressions of data needs with the aim of improving statistical products. While the BM consults internal users and the Transparency Portal serves as a channel for questions from the private sector, it does not have a formal process of consultation with private sector users. **Other quality management.** The BM appears fully aware of quality as the keystone for the credibility of its statistics. To this end, there are auditing statistical procedures through the internal audit office.	**Institutional Integrity.** The BM is staffed with well-qualified personnel, and compilers participate in external courses and receive on-the-job training. Macroeconomic statistics are compiled in accordance with strict technical considerations and are disseminated withoutpolitical interference. The BM has a long tradition of independence, professionalism, and impartiality. If an incorrect interpretation is observed, efforts are made to contact the respective person or organization to explain the issue. **Transparency.** The BM Law is available on the BM website. There is data sharing among the public agencies that collaborate with the BM in the production of the ESS—SHCP, INEGI, the Secretariat of Economy. Data are released simultaneously to the public. The terms and conditions under which statistics are compiled and disseminated are made available to reporting entities but not to the public. **Ethical standards.** There are clear codes of conduct for staff in the BM Law, the 2019 BM Code of Ethics, the Federal Law on the Administrative Responsibilities of Civil Servants, and in the CGT. Article 24 ofthe CGT specifies that BM personnel must use discretion in the exercise of their duties, keeping BM matters strictly confidential. Also, the BM has issued a code of ethics that regulates the standards of behavior for all staff undertaking statistical activities.

Table 3a. Mexico: Assessment of Data Quality—Dimensions 2 to 5—National Accounts

2. Methodological soundness	3. Accuracy and reliability	4. Serviceability	5. Accessibility
Concepts and definitions. National Accounts are compiled following the *2008 SNA*. **Scope.** Annual and quarterly GDP estimates are compiled by the production, and expenditure approaches at current and constant prices. Annual and quarterly GDP is also compiled by the income approach at current prices. Annual and quarterly sectoral accounts are also compiled and published. The economic territory, production and assets boundaries are in general accordance with the *2008 SNA*. Illegal activities are not included. **Classification/sectorization.** Economic activities are classified according to the North America Industry Classification System, compatible with ISIC rev. 4. COICOP and COFOG are used to classify household consumption and government expenditures, respectively. **Basis for recording.** All transactions are recorded in accordance with the valuation principles of the *2008 SNA*. Transactions are recorded on an accrual basis, except for the quarterly government accounts. Imports and exports are not recorded on a change in ownership basis, although special tabulations are available for users.	**Source data.** Mexico has a very comprehensive regular system of censuses and economic surveys. Censuses have a five-year frequency; and surveys are conducted with monthly and annual periodicity. Data on the BOP are received from the BM. Adequate quarterly data on the federal government and the state governments are available; quarterly information on municipal governments is based on a sample. **Assessment of source data.** Appropriate methods are applied to validate the source data. **Statistical techniques.** Quarterly GDP by production is compiled at a quite disaggregated level ensuring an appropriate capture of changes in the production structure. GDP by expenditure is independently estimated. The Denton method is used for benchmarking the quarterly data. Seasonally adjusted data are estimated **Assessment and validation of intermediate data and statistical outputs.** When detected, discrepancies are investigated and addressed. The supply and use framework is used to make the NA data consistent. **Revision studies.** Revision studies are conducted regularly, but only major revisions are disclosed. Explanations of the revisions are only provided in the case of a change in the base year.	**Periodicity and timeliness.** Periodicity and timeliness of the national accounts exceeds the SDDS requirements. **Consistency.** Data are consistent for long periods. With each change of the base year, the series are recalculated backward; the 2013 base data were recalculated back to 1993 for quarterly data. Quarterly estimates are reconciled with the annual estimates. The national accounts are broadly consistent with the BOP data but there are differences, mainly related to timing and revision policies. Differences are more substantial when comparing the BOP financial accounts and the NA' financial account for the rest of the world. There are discrepancies with the government finance statistics owing to differences in the institutional coverage and the basis of recording. **Revision policy and practice.** There is a well-established cycle of production and revisions, which is known to the general public. In July and December, a calendar for the following year is posted on the INEGI website Exact release dates are provided six months in advance. Quarterly data for the current year are revised with the release of each new quarter. Revisions of previous years' data are made at the time the first final annual estimates are published at the end of the year. There is a regular cycle for changing the base year. Internal revision studies are produced but not published.	**Data accessibility.** Quarterly data along with analytical commentary are disseminated through a press release posted on the INEGI website. Data on quarterly GDP by production with sufficient breakdowns are made available on the website, along with tables of global supply and use of goods and services. Seasonally adjusted GDP series are also published. Quarterly data are available from 1993 and annual data are available from 1980. **Metadata accessibility.** Metadata is available on the INEGI website but lacks sufficient detail on compilation methods. Summary methodologies are posted on the IMF's DSBB and the OECD website. **Assistance to users.** Assistance to users is managed through the INEGI website. Contact information is clearly visible for users.

Table 3b. Mexico Assessment of Data Quality—Dimensions 2 to 5—Government Finance Statistics

2. Methodological soundness	3. Accuracy and reliability	4. Serviceability	5. Accessibility
Concepts and definitions. The national concepts and definitions used in compiling GFS broadly follow the *GFSM 1986*. There are no explicit plans to migrate to the *GFSM 2014*. Annual and quarterly data fully consistent with the *GFSM 2014* are not compiled. **Scope.** Compilation of GFS follow two methodologies: a) the traditional one with national definitions and concepts; and b) the public sector borrowing requirement (PSBR), an international presentation that aims to follow the *GFSM 2014*. The tables recommended by the *GFSM 2014* are not compiled. The data on general government disseminated in June 2021 do not include municipalities. **Classification/sectorization.** A table showing the institutional units in the public sector and subsectors is not published. There are major presentational differences with the latest international standards, including for sectorization and classification, and residency. For example, the nonfinancial public sector does not include state and local governments. **Basis for recording.** Revenue, expenditure, financing, and the overall balance in the fiscal statistics are presented on a modified cash basis. Information on states and municipalities, collected by INEGI are recorded on a modified accrual basis. Market valuation, period average exchange rates for flows, and some international standards for basis of recording (such as accrual recording) are not applied. In general, debt is recorded at face value.	**Source data.** The main sources of information for the fiscal statistics for the federal government are the administrative systems that monitor budget execution and accounting records, which cover all institutional units. For state and local governments, the main source is accounting records, complemented by a questionnaire for some municipalities. The main source of information for parastatal entities is the Integrated Information System for Government Revenues and Expenditure (SII). *The classifications and groupings are consistent with the GFSM 1986*. Source data are timely, except for state and local governments, although timeliness has improved in recent years. **Assessment of source data.** Fiscal statistics are generally based on complete information. Data on the federal public sector are cross-checked with other accounting records. **Statistical techniques.** Compilation procedures are sound. Consolidation of data for institutional aggregates follows *GFSM 1986* for the national/traditional presentation and *GFSM 2014* for the PSBR presentation. **Assessment and validation of intermediate data and statistical outputs.** Information on revenue, expenditure, financing, and debt is regularly reconciled with the budgetary records of various SHCP units and with bank records. Statistical discrepancies are investigated. **Revision studies.** Revisions to data incorporate all changes resulting from new information, and the reasons for the changes are known. Internal revision studies are undertaken to improve the quality of the fiscal statistics, but these studies are not made public.	**Periodicity and timeliness.** The periodicity and timeliness of the GFS meet SDDS requirements. **Consistency.** The various accounting identities are observed. Monthly statistics use the same concepts, definitions, and classifications used for annual statistics. Also, the sum of monthly statistics equals quarterly and annual statistics. Time series are consistent. However, debt and financing for state and local governments contain inconsistencies. In general, reconciliation of data across macroeconomic datasets is not conducted on a regular basis and some inconsistencies exist across the publicly available data (e.g., net portfolio investment for the nonfinancial public sector does not match the external sector statistics). **Revision policy and practice.** The main revision of data takes place when the information for the Federal Public Accounts becomes available. This information is audited and considered final. Revisions are also made in the month following the publication of preliminary data. The public is not provided with information on the schedule of revisions or the analysis and explanations about revisions.	**Data accessibility.** The data are presented primarily for budget monitoring and analyses. The national presentation of fiscal statistics is not suitable for cross-country comparisons. Detailed tables following the *GFSM 2014* are not compiled and disseminated. An advance release calendar is published. **Metadata accessibility.** Methodological notes explaining concepts, sources and methods are disseminated on the SHCP's and INEGI's websites. Methodological notes are also published on the IMF's DSBB. **Assistance to users.** The presentation and navigation on the SHCP website could be strengthened to further ease users' experience. A telephone number, and an address for queries about the fiscal statistics appears on the SHCP website. Contact information is also posted on INEGI website.

Table 3c. Mexico Assessment of Data Quality—Dimensions 2 to 5—External Sector Statistics

2. Methodological soundness	3. Accuracy and reliability	4. Serviceability	5. Accessibility
Concepts and definitions. Balance of payments and IIP statistics are compiled according to the *BPM6*. The BM also maintains another time-series compiled according to the *BPM5*. External debt is compiled, for the most part, based on the previous edition (2003) of the *EDS Guide*. **Scope.** The ESS cover the transactions of institutional units' resident in Mexico with the rest of the world. **Classification/sectorization.** Classification and sectorization of the BOP and IIP broadly follows the recommendations of the *BPM6*. Classification and sectorization of the external debt use a mix of the last and previous editions of the *EDS Guide*. Cross-country comparability of data is hindered by the use of national classifications and presentations rather than the standard classifications of *BPM6 and EDS Guide*. Intercompany debt is not classified as external debt, sectors are classified using a mix of institutional sector and public/private concepts, and on-lent funds are attributed to the sector of the "final user" of the funds, instead of the unit that borrows from nonresidents. **Basis for recording.** Every effort is made to ensure valuation at market prices and recording on an accrual basis. However, public sector debt is recorded at face value and interest on public sector financial assets and liabilities is on a cash basis. Considering that CETES are issued at a discount and represent around 15 percent of government's outstanding securities, recording interest on a cash basis could cause significant differences.	**Source data.** Source data used in compiling the balance of payments, IIP and external debt statistics are in general adequate and timely. However, source gaps are emerging in the current account particularly for digital services. Efforts are made to maintain adequate coverage in financial transactions of the nonfinancial private sector. **Assessment of source data.** There is a range of comprehensive checks for internal consistency, comparisons with other sources, and routine queries when large transactions are detected. **Statistical techniques.** A series of measures have been established to control quality and conduct appropriate and timely verification of the information collected through surveys, both before and after electronic processing. **Assessment and validation of intermediate data and statistical outputs.** Statistical discrepancies in the intermediate data are assessed and investigated. Trends in the major components of the BOP, IIP, and external debt are monitored using statistical methods. **Revision studies.** Although the direction and size of the revisions between the preliminary and final data are examined, no formal studies are conducted or published to inform statistical processes and users.	**Periodicity and timeliness.** The periodicity and timeliness of all external sector statistics meet SDDS requirements. **Consistency.** The statistics are broadly consistent internally and overtime. However, consistency could be improved between the IIP and external debt. There are differences between the balance of payments and national accounts, notably in the financial account and financial positions. **Revision policy and practice.** There is no formal revisions policy. No formal procedure has been established for disseminating studies and analysis of revisions.	**Data accessibility.** Data access is provided through the BM website. Data are available in several formats and aggregation levels. Data are released on a preannounced schedule available on the NSDP, following the SDDS requirements. IIP and external debt statistics are not included in the advance release calendar maintained by the BM. **Metadata accessibility.** Metadata are available, although more detail and timely updates (particularly in the case of the external debt) are needed. **Assistance to users.** Support and advisory assistance are provided to users on request by e-mail. The BM responds to users' questions in a timely manner.

STAFF'S RECOMMENDATIONS

Based on the review of statistical practices, discussions with the data producing agencies, and responses from data users (see Appendix III of the Detailed Assessments—Volume III), the mission has developed a set of recommendations. These are designed to increase further Mexico's adherence to internationally accepted standards, and their implementation would, in the mission's view, enhance the analytical usefulness of the data. Some additional technical suggestions are included in the Detailed Assessments (Volume III).

CROSS-CUTTING RECOMMENDATIONS

Strengthen consistency across the macroeconomic statistics by further harmonizing the terminology, coverage, sectorization, classification of transactions and positions, valuation methods, as well as the adjustments to source data. INEGI, BM and SHCP are encouraged to create a Working Group on Consistency among Fiscal Statistics, External Sector Statistics and National Accounts.

[2] This working group would establish subgroups that would be tasked with:

- ✓ Updating a common public sector universe—the list of all public entities and the identification of the sector to which each entity belongs.
- ✓ Recording and publishing decisions concerning the sectorization of public entities.
- ✓ Publishing the public sector universe as a statistical product, identifying which units are included in the various subsectors of the public sector in the (1) fiscal accounts for the purposes of both the national and international (PSBR) presentations, (2) the national accounts (institutional sector accounts), (3) the balance of payments/IIP, and (4) external debt statistics.
- ✓ Harmonize the classification and valuation of transactions, instruments, positions and cash to accrual adjustments.
- ✓ Produce and publish annual reconciliation and bridging tables across the two sets of fiscal statistics, balance of payments/IIP and external debt statistics and national accounts.

- Over the last several years, specific areas of the SNIEG have made notable advances in statistical operations and processes and invested in statistical infrastructure. These improvements should be extended across the entire SNIEG such that:

  - ✓ Statistical business processes (e.g., design, collection, process, analysis, etc.,) are standardized (where possible) across INEGI, BM and SHCP.[3]
  - ✓ INEGI, BM and SHCP align their accessibility and dissemination practices, providing users

[2] This working group could be established under the existing Technical Committee on Macroeconomic Statistics and National Accounts. If appropriate, consideration could also be given to establish a new Technical Committee responsible for consistency among the macroeconomic statistics.

[3] In fact, this recommendation could extend to the entire SNIEG.

of official macroeconomic statistics with a common user-friendly experience when accessing and interacting with national accounts, external sector, and fiscal statistics.

- ✓ INEGI, BM, and SHCP develop a modern and streamlined process/procedures/protocols for sharing data among organizations.
- ✓ Implement a legal framework that clearly establishes the mandatory reporting of data to the BM for the compilation of ESS by the nonfinancial corporations. If that is not possible, joint INEGI-BM procedures for conducting surveys should be implemented under the LSNIEG, in such a way that nonfinancial corporations can be compelled to directly provide the information required by the BM to compile ESS.

- Mexico currently subscribes to the IMF SDDS and its statistical system is mature and well-positioned to adhere to the IMF's SDDS Plus. Mexico would do well to launch the process to adhere to the IMF's SDDS Plus, working over the next five years towards:
  - ✓ Improving the timeliness of sector balance sheets from 155 days to 120 days.
  - ✓ Publishing quarterly estimates of general government operations with the required details within a 12-month lag.[4]
  - ✓ Publishing quarterly estimates of general government debt with the required details within a 4-month lag.

A. National Accounts

- Given that INEGI collects and publishes extensive annual and monthly production, expenditure, and income statistics, it is well positioned to compile chained GDP volume indices using previous period annual weights. This would provide an improved estimate of economic growth, especially in periods of structural change. This should be implemented in stages given the communication challenges associated with this type of change. (3.3.2)

- The SNA and *BPM6* recommend that imports and exports are recorded on a change of ownership basis. Currently, both INEGI and BM impute a change in ownership when goods and services cross the customs frontier. Given the importance of Maquila in Mexico, INEGI, in cooperation with the BM should develop experimental estimates of manufacturing services on physical inputs owned by others, and subsequently both Institutions could discuss trilaterally with the engaged statistical agencies of the US and Canada ways to advance on this matter. Once these estimates are mature, and in coordination with the main trading partners, INEGI and BM should adopt the *2008 SNA* and *BPM6* recommendations. (3.3.2)

- Investigate the feasibility of using satellite images of agricultural land to detect the extent of illegal crops. INEGI should supplement this data with models developed from specialized studies and information on merchandize seized by law enforcement (i.e., Drug Enforcement Administration (DEA), etc.), to develop experimental estimates of illicit crop and drug

[4] In order to improve the timeliness of data on the state and municipal governments, the SHCP and INEGI may want to consider estimating the current period using a sample of municipalities and state institutional units.

production, consumption, and exports. If the estimates are material, INEGI should work to incorporate these measures into official national accounts statistics. (3.3.2)

- Conduct the National Household Income and Expenditure Survey (ENIGH) during a complete calendar year to avoid seasonality in household data so that the ENIGH results can be used in the compilation of the national accounts. (3.1.1)
- Produce estimates of replacement cost consumption of fixed capital (CFC) for the general government. The CFC expense should be included in the measure of government output. (3.3.2)
- INEGI periodically undertakes national accounts revision studies, and it should produce an annual national accounts revision report to be published on its website. (4.3.3)
- Expand the existing national accounts metadata to provide more detailed information on calculation procedures to assist users with the interpretation of the national accounts. (5.2.2.)

B. Government Finance Statistics

- Modify the compilation of annual fiscal statistics in the international presentation to conform more fully to the concepts and definitions in the *GFSM 2014*. (2.1.1)
- Compile and disseminate quarterly general government statistics building on the statistics disseminated in June 2021, with a complete set of statements. This would help preparations to adhere to the SDDS Plus requirements. (2.1.1)
- Develop a *GFSM 2014* migration plan (including steps already envisaged) and consider adding target completion dates for the various steps. (2.1.1)
- Publish a table of all institutional units in the public sector and its subsectors, and clearly group them according to: 1) the traditional coverage of units used in the national presentation of fiscal statistics; 2) the coverage used in the international presentation of fiscal statistics (highlighting any differences from international standards); and 3) the subsectors of the public sector as described in the *GFSM 2014*. (2.2.1)
- Use the residency criterion to classify transactions and positions in financial instruments as domestic or external in collaboration with INEGI and the BM. (2.3.1)
- If foreign currency transactions cannot be converted into Mexican pesos at the mid-point exchange rate prevailing in the market on the day the transactions take place, use the period average exchange rate for the month when the transaction is recorded. Positions can continue to be converted using the end-of-period exchange rate. (2.4.1)
- Implement recording on a cash basis for the Statement on Sources and Uses of Cash and incorporate accrual or modified accrual in the other statements that follow the *GFSM 2014*. (2.4.2)

- Continue to implement harmonized accounting standards and related catalogs to facilitate the compilation of fiscal statistics according to the *GFSM 2014*. (3.1.1)
- Continue to improve the timeliness in the reporting/collection and compilation of data on state and municipal governments, aiming at publishing quarterly data within four months of the reference quarter. (3.1.3)
- To supplement information disseminated under the SDDS, consider adding data on the annual general government operations to the NSDP with timeliness of within six months, consistent with SDDS requirements. Based on data disseminated in June 2021 with this coverage and timeliness, this is feasible and would remove the need for an SDDS flexibility option. (4.1.2)
- Aim to diminish statistical discrepancy between the state and local government operations (above-the-line) and the financing. Improved classification of financing operations currently recorded as part of revenue and expenditure may contribute to resolving much of these discrepancies. (4.2.1)
- Develop and publish reconciliation tables between the fiscal statistics and other sets of macroeconomic statistics, along with explanatory notes. Specifically, the reconciliation tables should describe how the fiscal statistics are used to derive the general government data as disseminated in the context of the quarterly national accounts, balance of payments, international investment position, external debt, and monetary and financial statistics. (4.2.1)
- Clearly indicate to users whether observations are revised, or final. (4.3.2)
- Make revisions studies public. (4.3.3)
- Strengthen the presentation and navigation on the SHCP website for fiscal statistics by providing users with detailed tables, time series and charting capabilities for coverage, instrument and transaction classifications, and presentation formats. For example, general government statistics should include a: Statement of Sources and Uses of Cash; Statement of Operations; Statement of Other Economic Flows; and Balance Sheets, following the GFSM 2014. (5.1.1)

C. Balance of Payments Statistics, IIP, and External Debt

- Consult with data users, at least annually, regarding the quality and relevance of ESS. (0)
- Publish the terms and conditions under which ESS are compiled and disseminated. (1)
- Establish and disseminate a revision policy and conduct and publish revision studies. (3, 4)
- Ensure consistency in the valuation of debt securities at market price, recording interest following the accrual principle and use original maturity to classify debt instruments across the ESS. (2)

- Consistent with the recommendations for the national accounts program, within the governance structure of the SNIEG and in coordination with the US and Canadian compilers, develop experimental estimates of manufacturing services on physical inputs owned by others. Once these estimates are of sufficient quality, in coordination with major trading partners, implement the BPM6 recommendation. (2)

- There is a need to reinforce the authority of the BM to collect statistical information from the nonfinancial private sector. This would require a legal framework that clearly establishes the mandatory reporting of data to the BM for the compilation of ESS, or joint INEGI-BM procedures to conduct surveys under the authority of the Statistical Law.

- In the framework of the SNIEG committees and working groups, establish a plan to compile data on digital services acquired from nonresidents by households. This plan should ensure the provision to the BM of fiscal data related to digital services, information on credit/debit card transactions and any other information required to produce an accurate estimate.

- In cooperation with INEGI, compile transactions in the secondary income and financial account related to insurance services. (2)

- Revise the external debt compilation process to enhance adherence to guidelines in the *BPM6* and the *EDS Guide*, and to ensure consistency with the IIP. (3)

- Disseminate external debt following the presentations established in the Guide with bridging tables between the external debt published by the BM and the public external debt disseminated by the SHCP. (4)

- Disseminate the balance of payments and the IIP with a structure (institutional sectors and financial instruments) consistent with the standard components of the *BPM6*, including additional details considered relevant for the Mexican economy, if needed. (4)

- Consider the costs and benefits of discontinuing the publication of the *BPM5* series, taking due account of users' feedback. (4)

- Disseminate a release calendar covering all external sector statistics, including the IIP and external debt. (1)

- Expand the information provided about metadata in the methodological notes for the balance of payments and the IIP and update the methodological note for the external debt statistics. (5)

- Publish press releases for the IIP and external debt statistics, to better promote use of these data among users. (5)

Appendix I. Practices Compared to the SDDS Plus

1. Mexico meets SDDS Plus requirements for six of the nine data categories, with the three uncomplying series comprising the sectoral balance sheet (timeliness), data on general government operations (timeliness and periodicity) and general government debt (timeliness and periodicity). Officials from the National Institute of Statistics and Geography (INEGI), the Ministry of Finance (SHCP), and the Central Bank of Mexico (BM) expressed strong interest to adhere to the SDDS Plus.

2. Mexico meets the SDDS Plus requirements for six of the nine SDDS Plus data categories (Table 1).[5] The three uncomplying series comprise the sector balance sheet (for timeliness), data on general government operations (timeliness and periodicity), and general government debt (timeliness and periodicity). Mexico disseminates sufficient data to comply with requirements related to data on the Other Financial Corporations Survey, Financial Soundness Indicators, Debt Securities, Coordinated Direct Investment Survey, Coordinated Portfolio Investment Survey, and the Currency Composition of Official Foreign Exchange Reserves (COFER).[6] Mexico exceeds the periodicity and timeliness requirements for data on the Other Financial Corporations Survey and Financial Soundness Indicators.

3. Annual general government operations and general government debt are published with a 19-month lag, compared with a requirement of quarterly data with a 12-month and four-month lag respectively. The Ministry of Finance currently disseminates partial data on general government operations (excluding municipalities), and general government debt at or exceeding the required periodicity and timeliness.[7] Sectoral Balance Sheet data are disseminated with somewhat longer than prescribed timeliness (155 days vs. 4 months), which also should be improved.[8]

4. Mexico could consider adhering to the SDDS Plus using the option of adopting a transition plan for the three above-noted data categories. To do so, as per the SDDS Plus Guide (¶1.17), the authorities would need to commit to comply with all SDDS Plus requirements within five years following the date of adherence, with credible compliance plans. The authorities' ongoing efforts to improve data collection from municipalities should help comply with the fiscal data requirements and support the improvement in the timelines of sectoral balance sheet data. These improvements are also in line with the broader ROSC recommendations on fiscal data.

5. Adhering to the SDDS plus also will require modernizing Mexico's National Summary Data Page to include links to SDDS Plus data series in SDMX format. As an SDDS Plus adherent, Mexico would need to disseminate data series (rather than latest data points) on a machine-to-machine format (SDMX) which will also enhance data sharing and better serve users. The adherence process

[5] Mexico subscribed to the SDDS on August 13, 1996; the latest annual observance reports can be found here.

[6] COFER data is confidential, and the mission team did not have access to these data. The assessment is based on Mexico's self-reporting participation in COFER.

[7] See ¶3.5 in the SDDS Guide for options how to reflect small government units within the general government.

[8] Currently, the timeliness of Sectoral Balance Sheet data exceeds the timeliness of the general government debt as the compiler (INEGI) relies on other data sources.

also will require the updating of metadata as relevant, and the preparation of the SDMX files in compliance with the presentation requirements of each data category as described in the SDDS Plus Guide.

Table 1. Mexico: Current Data Dissemination Practices via-a-vis SDDS Plus Requirements (June 15, 2021)

Data category	Coverage	Periodicity		Timeliness	
		SDDS Plus	Mexico	SDDS Plus	Mexico
1 Sectoral balance sheets	Coverage met	Q	Q	4M	155 days
2 General Government Operations 1/	Coverage met	Q	A	12M	19M
3 General Government Debt /2	Coverage met	Q	A	4M	19M
4 Other Financial Corporations Survey	Coverage met	Q	M	4M	2M
5 Financial Soudness Indicators	Coverage met	Q	M	Q	2M
6 Debt securities	Coverage met	Q	Q	4M	4M
7 Coordinated Direct Investment Survey (CDIS)	Coverage met	A	A	9M	9M
8 Coordinated Portfolio Investment Survey (CPIS)	Coverage met	SA	SA	7M	7M
9 Currency composition of Official Foreign Exchange Reserves (Cofer)	Coverage met	Q	Q	Q	Q

Source: Preliminary assessment based on publicly available information and mission discussions.

1/ Currently Mexico uses a flexibility option for timeliness of General Government Operations to subscribe to the SDDS.

2/ Mexico currently disseminate General Government Operations and General Government Debt Data with a quarterly periodicity and a 4M timeliness but it excludes munic

Legend:

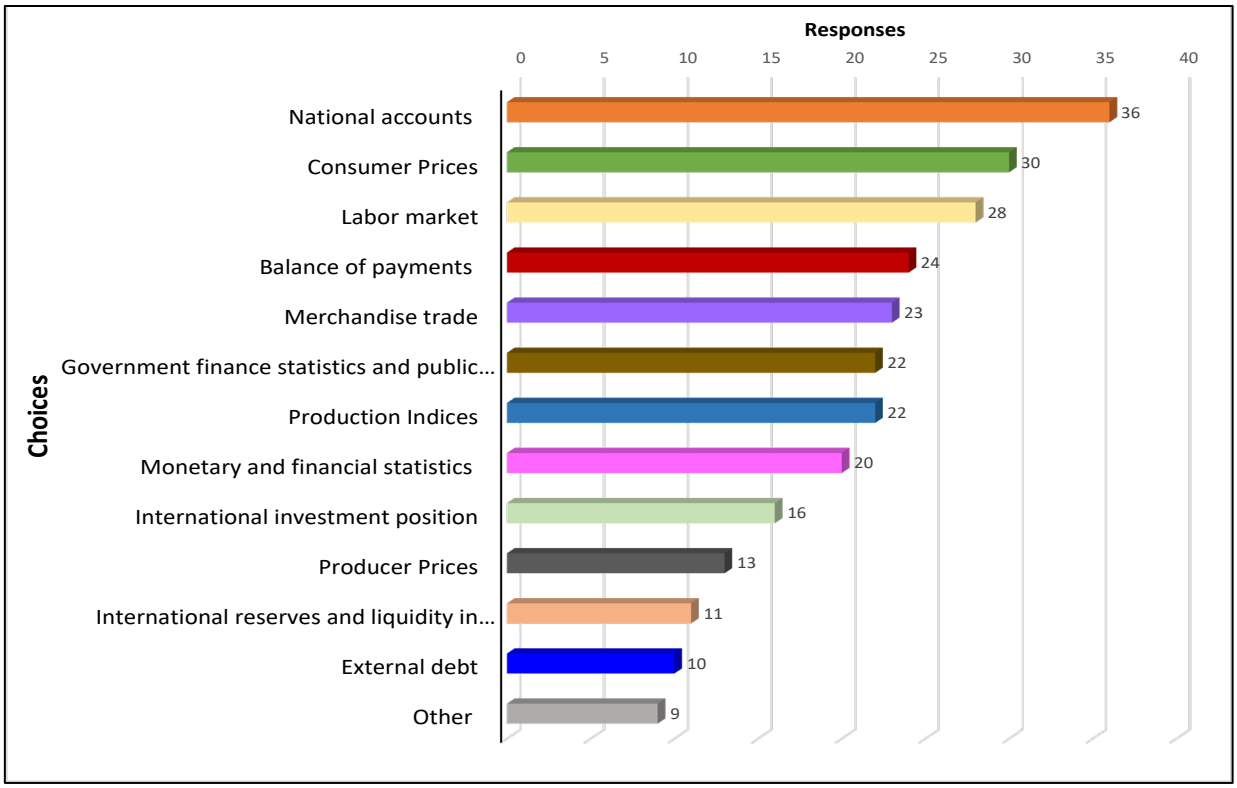
Exceeds requirements	Meets requirement	Needs improvement

Appendix II. Users' Views

1. The Data ROSC mission conducted a survey of users of the macroeconomic statistics during May 27—June 10, 2021 to obtain their views on data quality. The survey was mailed out to 350 individuals identified by INEGI, BM and SHCP. Forty-seven responses were received from representatives of the private sector, commercial banks, consulting companies, academic institutions, and government agencies. To follow up on the survey, the mission had two meetings with selected private and public sector users to provide an overview of survey results and to elicit comments.

2. Respondents indicated strong interest in the national accounts, balance of payments and government finance statistics, with less demand for the international investment position and gross external debt.

What Official Statistics Do You Use Regularly?



3. In general, respondents indicated satisfaction with the coverage of the official statistics. Nonetheless, several users suggested that INEGI should extend the national accounts' time series and provide more detail by industry and at regional and sectoral levels. Others noted the need for more granular government finance statistics on revenues and expenditures as well as on financial instruments. Data are used for a variety of purposes, most often for monitoring current economic trends for decision making and economic research. Users pointed out that they receive information via press releases published by INEGI, BM and SHCP and from official policy documents, but statistics are overwhelmingly accessed via institutional websites.

In general, do you consider the coverage of official statistics satisfactory?		
	Yes	No
National accounts	83.8%	16.2%
Government finance statistics and public debt	87.0%	13.0%
Balance of payments	88.0%	12.0%
External debt	90.9%	9.1%
International investment position	70.6%	29.4%

4. Users also were satisfied with the frequency of the various macroeconomic statistics but indicated interest in more timely data on monthly consumption and investment, and on the quarterly international investment position. Some respondents were not aware of the release calendars and would like to be provided with more information on the source of revisions.

5. Respondents are generally satisfied with the methodological soundness of the macroeconomic statistics, indicating a high level of trust in official data.

In your opinion, is the basic methodology of official statistics sound and adequate?		
	Yes	No
National accounts	94.6%	5.4%
Government finance statistics and public debt	82.6%	17.4%
Balance of payments	87.5%	12.5%
External debt	100.0%	0.0%
International investment position	82.4%	17.6%

6. Most respondents considered the macroeconomic statistics to be unbiased and accurate, although some respondents noted a few concerns.

In general, do you consider official statistics to be unbiased and accurate?		
	Yes	No
National accounts	77.8%	22.2%
Government finance statistics and public debt	78.3%	21.7%
Balance of payments	80.0%	20.0%
External debt	90.9%	9.1%
International investment position	70.6%	29.4%

7. Most users were satisfied with access to the macroeconomic statistics, but some noted issues with access to the international investment position. Respondents indicated that accessing metadata was more difficult than accessing data.

Do you have easy access to the following official statistics?		
	Yes	No
National accounts	86.5%	13.5%
Government finance statistics and public debt	82.6%	17.4%

Balance of payments	84.0%	16.0%
External debt	81.8%	18.2%
International investment position	58.8%	41.2%

8. Overall, users were generally satisfied with the quality of Mexico's macroeconomic statistics. Most respondents felt that the official statistics are better or at least as good as those of other countries in the region. Only a few users felt that some macroeconomic statistics are worse than those of other countries in the region.

How would you rate the quality of the country's official statistics in comparison with those of other countries in the region?			
	Better	**Same**	**Worse**
National accounts	65.9%	26.8%	7.3%
Government finance statistics and public debt	58.3%	30.6%	11.1%
Balance of payments	52.9%	41.2%	5.9%
External debt	45.7%	48.6%	5.7%
International investment position	45.7%	40.0%	14.3%

INTERNATIONAL MONETARY FUND

MEXICO

REPORT ON THE OBSERVANCE OF STANDARDS AND CODES—DATA MODULE VOLUME II

December 8, 2021

RESPONSE OF THE AUTHORITIES

This document contains the authorities' response to the IMF's data quality assessment (Volumes I and III).

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RESPONSE OF THE AUTHORITIES

A. Introduction

In June 2021, the International Monetary Fund (IMF) held an official staff visit (carried out remotely) to review Mexico's National Accounts, External Sector, and Public Finance statistics and generate a Report on the Observance of Standards and Codes (ROSC). Five aspects of the information generation and dissemination process were evaluated: institutional framework, methodological soundness, accuracy and reliability, serviceability, and accessibility.

The Government of Mexico would like to thank the IMF staff for its work during the mission and its recommendations. These efforts have contributed to the detection of strengths and areas of opportunity for Mexican macroeconomic statistics. The National Institute of Statistics and Geography (INEGI), the Central Bank of Mexico (BM), and the Ministry of Finance and Public Credit (SHCP) reaffirm their commitment to the permanent improvement and strengthening of good practices of the Mexican statistical system in order to provide society with timely, useful, and high-quality information.

The three institutions appreciate the recognition that the IMF has made regarding the progress achieved during the last decade, considering that the statistics of the three institutions are robust and of a high quality and integrity which has strengthened the country's statistical system; that there is both a legal framework that clearly establishes the responsibilities of the three institutions and adequate resources that allow transparency and disclosure of information to the entire public with autonomy of decision; that public servants who participate in the process of collection, treatment, and publication of statistics have professionalism, ethics, and integrity, and that there is adequate cooperation between the three institutions that goes beyond simple compliance with the norm and strengthens the institutional framework of the Mexican statistical system.

B. Response to Cross-cutting Recommendations

1. Strengthen consistency across the macroeconomic statistics by further harmonizing the terminology, coverage, sectorization, classification of transactions and positions, valuation methods, as well as the adjustments to source data. INEGI, BM and SHCP are encouraged to create a Working Group on Consistency among Fiscal Statistics, External Sector Statistics and National Accounts.[1] This working group would establish subgroups that would be tasked with:

- Updating a common public sector universe—the list of all public entities and the identification of the sector to which each entity belongs.

[1] This working group could be established under the existing Technical Committee on Macroeconomic Statistics and National Accounts. If appropriate, consideration could also be given to establish a new Technical Committee responsible for consistency among the macroeconomic statistics.

- Recording and publishing decisions concerning the sectorization of public entities.
- Publishing the public sector universe as a statistical product, identifying which units are included in the various subsectors of the public sector in the (1) fiscal accounts for the purposes of both the national and international (PSBR) presentations, (2) the national accounts (institutional sector accounts), (3) the balance of payments/IIP, and (4) external debt statistics.
- Harmonize the classification and valuation of transactions, instruments, positions and cash to accrual adjustments.
- Produce and publish annual reconciliation and bridging tables across the two sets of fiscal statistics, balance of payments/IIP and external debt statistics and national accounts.

Taking advantage of the operation and coordination infrastructure offered by the National Statistical and Geographic Information System (SNIEG by its acronym in Spanish), a Working Group on Consistency between Fiscal Statistics, External Sector Statistics, and National Accounts will be established under the coordination of INEGI within the existing Technical Committee of Macroeconomic Statistics and National Accounts, in order to address the ROSC's observations and to continue the efforts of harmonization of terminology, coverage, sectorization, classification of transactions and positions, valuation methods, and adjustments to source data. In addition to INEGI, BM and SHCP, other institutions may join as guests to contribute to this effort.

2. Over the last several years, specific areas of the SNIEG have made notable advances in statistical operations and processes and invested in statistical infrastructure. These improvements should be extended across the entire SNIEG such that:

- Statistical business processes (e.g., design, collection, process, analysis, etc.) are standardized (where possible) across INEGI, BM and SHCP.[2]
- INEGI, BM and SHCP align their accessibility and dissemination practices, providing users of official macroeconomic statistics with a common user-friendly experience when accessing and interacting with national accounts, external sector, and fiscal statistics.
- INEGI, BM, and SHCP develop a modern and streamlined process/procedures/protocols for sharing data among organizations.
- Implement a legal framework that clearly establishes the mandatory reporting of data to the BM for the compilation of ESS by the nonfinancial corporations. If that is not possible, joint INEGI-BM procedures for conducting surveys should be implemented under the LSNIEG, in such a way that nonfinancial corporations can be compelled to directly provide the information required by the BM to compile ESS.

It is intended that, through the new Working Group mentioned in Recommendation 1, the Statistical and Geographic Process Model be adopted as a frame of reference for the production and exchange of official information between the institutions involved, in order to facilitate joint work

[2] In fact, this recommendation could extend to the entire SNIEG.

and reinforce what is already established in the SNIEG, allowing, at the same time, to regulate this relationship and to comply with the legal precepts and powers conferred by 3

legislation current to each institution. As for the mandatory reporting of data to BM, this institution will explore internal channels, as well as inter-institutional cooperation with INEGI, to strengthen nonfinancial corporations' obligations to directly provide BM the required information.

3. Mexico currently subscribes to the IMF SDDS and its statistical system is mature and well-positioned to adhere to the IMF's SDDS Plus. Mexico would do well to launch the process to adhere to the IMF's SDDS Plus, working over the next five years towards:

- Improving the timeliness of sector balance sheets from 155 days to 120 days.
- Publishing quarterly estimates of general government operations with the required details within a 12-month lag.[3]
- Publishing quarterly estimates of general government debt with the required details within a 4-month lag.

Mexico is committed to continue working on improving data transparency and on enhancing its statistical systems. As a step towards meeting IMF's SDDS Plus, INEGI will implement a gradual process of reducing time in calculating the sectoral balance sheets. Likewise, the three institutions will join efforts in obtaining the necessary and timely statistical inputs to be able to fulfill such requirement. In addition, further steps shall be assessed and implemented by the institutions within the SNIEG framework.

C. Response to the National Accounts Statistics Recommendations

4. Given that INEGI collects and publishes extensive annual and monthly production, expenditure, and income statistics, it is well positioned to compile chained GDP volume indices using previous period annual weights. This would provide an improved estimate of economic growth, especially in periods of structural change. This should be implemented in stages given the communication challenges associated with this type of change. (3.3.2)

INEGI, through the General Directorate of Economic Statistics, generates, in addition to the Economic and Agricultural Censuses and the National Agricultural Survey, the National Economic Surveys in Establishments and Businesses on a monthly basis considering the following:

- Monthly Survey on Commercial Business (EMEC)
- Monthly Survey of the Manufacturing Industry (EMIM)
- Monthly Survey of Business Opinion (EMOE)
- Monthly Survey of Services (EMS)
- National Survey of Construction Companies (ENEC)

[3] To improve the timeliness of data on state and municipal governments, the SHCP and INEGI may consider estimating the current period using a sample of municipalities and state institutional units.

Annually:

- Annual Trade Survey (EAC)
- Annual Survey of Construction Companies (EAEC)
- Annual Survey of the Manufacturing Industry (EAIM)
- Annual Survey of Private Non-Financial Services (EASPNF)
- Annual Transport Survey (EAT)

This is then used to generate the information on average volumes and prices, on the variables that make up the gross value of production, and in some cases on intermediate consumption. Additionally, there are the National Consumer and Producer Price Indices, for completing the price baskets to be used as well as the administrative records that consider production volumes in the case of services with which the information from the surveys is complemented.

The sectors in which there is no coverage with monthly and annual surveys, such as agriculture, the financial sector, and the government, information is obtained from administrative records, financial statements, and some statistical records, in which mostly are consider volumes.

Taking this information into account as a basis for calculating chained indices, INEGI needs to allocate the necessary resources to implement an exercise that allows numerical tests to calculate these indices on the variables in which they are viable for such exercise. For this implementation, it will be necessary to establish a work program for technical assistance by the IMF, in order to have the corresponding advice for the best application of the methodology in accordance with the statistical infrastructure available.

5. The SNA and BPM6 recommend that imports and exports are recorded on a change of ownership basis. Currently, both INEGI and BM impute a change in ownership when goods and services cross the customs frontier. Given the importance of Maquila in Mexico, INEGI, in cooperation with the BM should develop experimental estimates of manufacturing services on physical inputs owned by others, and subsequently both institutions could discuss trilaterally with the engaged statistical agencies of the US and Canada ways to advance on this matter. Once these estimates are mature, and in coordination with the main trading partners, INEGI and BM should adopt the *2008 SNA* and *BPM6* recommendations. (3.3.2)

Some preliminary and experimental estimations of manufacturing services on physical inputs owned by others will be conducted by a joint task force between BM and INEGI. However, given the importance of value chains within the United States-Mexico-Canada Agreement framework, those estimates must be made in coordination with the US and Canada counterparts.

6. Investigate the feasibility of using satellite images of agricultural land to detect the extent of illegal crops. INEGI should supplement this data with models developed from specialized studies and information on merchandize seized by law enforcement (i.e., Drug Enforcement Administration (DEA), etc.), to develop experimental estimates of illicit crop and drug production, consumption, and exports. If the estimates are material, INEGI should work to incorporate these measures into official national accounts statistics. (3.3.2)

INEGI will take advantage of the proximity with the Center of Excellence for statistical information on government, public security, victimization, and justice (UNODC - INEGI) to verify the recommended methodologies and the experience of the implementation of the estimates in other countries. 5

Additionally, in Mexico efforts are already being carried out through projects of the UNODC's Global Illicit Crop Monitoring Program (ICMP), in which participate the Secretariat of the Navy (SEMAR), the Secretariat of the National Defense (SEDENA), the Ministry of Foreign Relations (SRE) and the Attorney General's Office (FGR) through the Coordination of Investigation Methods by the National Planning Center. In addition, it will seek to establish coordination and information exchange agreements with SEMAR, SEDENA and the FGR, with the purpose of having basic information that allows making estimates to include information in the System of National Accounts of Mexico.

7. Conduct the National Household Income and Expenditure Survey (ENIGH) during a complete calendar year to avoid seasonality in household data so that the ENIGH results can be used in the compilation of the national accounts. (3.1.1)

INEGI will review the resource needs and the strategy to be implemented, to manage with SHCP and the Congress of the Union the need to have a National Household Income and Expenditure Survey (ENIGH) for a full calendar year, in order to allow the generation of better indicators for the Statistical Information Programs of the Mexican SNA and the National Price Indices. As a background, it should be noted that the Institute requested resources for an Annual ENIGH survey in 2020, which was approved, but due to the Covid-19 pandemic, was canceled. Currently, the resource for carrying out the ENIGH during the entire calendar next year was included in the 2022 budget proposal.

8. Produce estimates of replacement cost consumption of fixed capital (CFC) for the general government. The CFC expense should be included in the measure of government output. (3.3.2)

As part of the activities of the Working Group on Capital Stock and the Working Group on Public Finance of the Specialized Technical Committee on Macroeconomic Statistics and National Accounts, joint efforts will be made to carry out an exercise that determines the amount and composition of the capital stock of the General Government, in order to be able to make the estimates corresponding to the consumption of fixed capital.

9. INEGI periodically undertakes national accounts revision studies, and it should produce an annual national accounts revision report to be published on its website. (4.3.3)

Information will be collected on the review studies that are carried out in each annual exercise on the Statistical Information Programs of the Mexican SNA and a report will be included to be published in accordance with the work plan established for this objective.

10. Expand the existing national accounts metadata to provide more detailed information on calculation procedures to assist users with the interpretation of the national accounts. (5.2.2.)

Currently, INEGI is in the process of changing the base year to 2018, which is intended to be completed by the end of 2023, in such a way that, when the products of the new base of the Mexican SNA Statistical Information Programs are published, the corresponding methodologies will be published, seeking to contain the details of the calculation procedures used. 6

D. Response to the Government Finance Statistics Recommendations

11. Modify the compilation of annual fiscal statistics in the international presentation to conform more fully to the concepts and definitions in the GFSM 2014. (2.1.1)

Currently, fiscal statistics are presented with classifications similar to the GFSM 2014. To address the recommendation, reports will be fully adjusted to the classifications of the GFSM 2014.

12. For the following recommendations:

Compile and disseminate quarterly general government statistics, building on the statistics disseminated in June 2021, with a complete set of statements. This would help preparations to adhere to the SDDS Plus requirements. (2.1.1)

Develop a GFSM 2014 migration plan (including steps already envisaged) and consider adding target completion dates for the various steps. (2.1.1)

Use the residency criterion to classify transactions and positions in financial instruments as domestic or external in collaboration with INEGI and the BM. (2.3.1)

Implement recording on a cash basis for the Statement on Sources and Uses of Cash and incorporate accrual or modified accrual in the other statements that follow the GFSM 2014. (2.4.2)

Continue to implement harmonized accounting standards and related catalogs to facilitate the compilation of fiscal statistics according to the GFSM 2014. (3.1.1)

Continue to improve the timeliness of data on state and municipal governments, including quarterly data within four months of the reference quarter. (3.1.3)

To supplement information disseminated under the SDDS, consider adding data on the annual general government operations to the NSDP with timeliness of within six months, consistent with SDDS requirements. Based on data disseminated in June 2021 with this coverage and timeliness, this is feasible and would remove the need for an SDDS flexibility option. (4.1.2)

Within the framework of SNIEG and the National Council for Accounting Harmonization, an evaluation will be carried out on the feasibility and the time necessary to adopt a complete

migration plan, have accounting standards and catalogs related to the GFSM 2014, and compile information on states and municipalities in a timely manner. The evaluation should consider the 7 recommendations on classifications, registration base, residence, and coverage.

The information that is currently published with the GFSM 2014 will be strengthened to broaden the classifications of assets and liabilities' instruments, and, when available, they will be presented at market value. The classifications of the transactions will be expanded and, when available, will be presented in accrued terms. In both cases, whenever possible, adjustments will be made to reflect residency criteria.

13. Publish a table of all institutional units in the public sector and its subsectors, and clearly group them according to: 1) the traditional coverage of units used in the national presentation of fiscal statistics; 2) the coverage used in the international presentation of fiscal statistics (highlighting any differences from international standards); and 3) the subsectors of the public sector as described in the GFSM 2014. (2.2.1)

For the federal public sector, the information is presented in the methodological note "The Fiscal Balance in Mexico" (http://presto.hacienda.gob.mx/EstoporLayout/metodologias.jsp). SHCP will disclose the information of all institutional units and information of states and municipalities will also be presented on the website with information from National Council for Accounting Harmonization.

14. If foreign currency transactions cannot be converted into Mexican pesos at the mid-point exchange rate prevailing in the market on the day the transactions take place, use the period average exchange rate for the month when the transaction is recorded. Positions can continue to be converted using the end-of-period exchange rate. (2.4.1)

Given the legal framework and budgetary control, at this point it is considered more convenient to preserve the methodology used for the traditional debt statistics. However, the recommendation will be considered for the elaboration of finance and public debt statistics according to the GFSM 2014.

15. For data on state and local governments, aim to reduce statistical discrepancy between operations (above-the-line) and financing. The reclassification of financing operations currently recorded as part of revenue and expenditure may contribute to resolving much of these discrepancies. (4.2.1)

This observation is addressed in the general government statistics prepared by SHCP which are based on the central government information that it generates and based on statistics for the states and municipalities that INEGI generates. The recommendation will be considered within the framework of SNIEG and the National Council for Accounting Harmonization.

16. Develop and publish reconciliation tables between the fiscal statistics and other macroeconomic statistics, along with explanatory notes. Specifically, the reconciliation tables should describe how the fiscal statistics are used to derive the general government data as

disseminated in the context of the quarterly national accounts, balance of payments, international investment position, external debt, as well as monetary and financial statistics. (4.2.1)

SHCP will coordinate with INEGI and BM, taking advantage of the infrastructure offered by SNIEG through working groups, in order to address the ROSC's observations. In addition, SHCP will strengthen its website to give greater dissemination to the reconciliations and explanations between fiscal and other macroeconomic statistics.

17. The following recommendations will be addressed:

Clearly indicate to users whether figures are revised, or final. (4.3.2)

Publish revisions studies. (4.3.3)

The methodological documents and notes to the reports will be adapted so the data review policy, its calendar, and status are clearer.

18. Strengthen the presentation and navigation on the SHCP website for fiscal statistics by providing users with detailed tables, time series and charting capabilities for coverage, instrument and transaction classifications, and presentation formats. For general government statistics, for example, detailed tables should include a: Statement of Sources and Uses of Cash; Statement of Operations; Statement of Other Economic Flows; and Balance Sheets, following the GFSM 2014. (5.1.1)

SHCP has already begun to strengthen the presentation and navigation as well as the link with other pages in statistical matters; changes will be made to the services that the current page already provides to make it more user-friendly and new services will be added.

E. Response to the Balance of Payments, IIP, and External Debt Statistics Recommendations

19. Consult with data users, at least annually, regarding the quality and relevance of ESS. (0)

Starting in 2022, formal meetings with main data users will be held annually in order to consult quality and relevance of ESS.

20. Publish the terms and conditions under which ESS are compiled and disseminated. (1)

A revised and expanded version of the methodological note for BP and IIP statistics will be published in February 2022 and a revised and expanded methodological note for the EDS will be published in March 2022. These notes will include the terms and conditions under which ESS are compiled.

21. Establish and disseminate a revision policy, and conduct and publish revision studies. (3, 4)

The revised and expanded version of the methodological notes for BP, IIP and EDS statistics 9 mentioned in recommendation 5 will include the existing revision policy. The recommendation regarding revision studies is under review.

22. Ensure consistency in the valuation of debt securities at market price, recording interest following the accrual principle and use original maturity to classify debt instruments across the ESS. (2)

BM has begun working with the information sources to ensure consistency in the valuation of debt securities at market price, record interest following the accrual principle and use original maturity to classify debt instruments across the ESS. The first two relate to the public sector, so under the SNIEG framework, BM will actively participate in the Working Group on Consistency among Fiscal Statistics, External Sector Statistics and National Accounts suggested in the cross-cutting recommendations.

23. Consistent with the recommendations for the national accounts program, within the governance structure of the SNIEG and in coordination with the US and Canadian compilers, develop experimental estimates of manufacturing services on physical inputs owned by others. Once these estimates are of sufficient quality, in coordination with major trading partners, implement the BPM6 recommendation. (2)

Some preliminary and experimental estimations of manufacturing services on physical inputs owned by others will be conducted by a joint task force between BM and INEGI. However, given the importance of value chains within the United States-Mexico-Canada Agreement framework, those estimates must be made in coordination with the US and Canada counterparts.

24. There is a need to reinforce the authority of the BM to collect statistical information from the nonfinancial private sector. This would require a legal framework that clearly establishes the mandatory reporting of data to the BM for the compilation of ESS, or joint INEGI-BM procedures to conduct surveys under the authority of the Statistical Law.

BM will explore internal channels as well as inter-institutional cooperation with INEGI, to strengthen nonfinancial corporations' obligations to directly provide BM the required information.

25. In the framework of the SNIEG committees and working groups, establish a plan to compile data on digital services acquired from nonresidents by households. This plan should ensure the provision to the BM of fiscal data related to digital services, information on credit/debit card transactions and any other information required to produce an accurate estimate.

Within the SNIEG framework, working groups to compile data on digital services acquired from nonresidents by the households will be created. BM will work closely with INEGI and the Tax

Authorities, with whom contact has already been established, to produce an accurate estimate. BM is also reviewing other internal sources, such as information on credit/debit card transactions.

26. In cooperation with INEGI, compile transactions in the secondary income and financial account related to insurance services. (2)

Under the SNIEG framework, BM and INEGI have started working together to ensure consistency among ESS and National Accounts regarding the secondary income and financial account related to insurance services. An initial assessment suggests that the current differences between the statistics stem from the differing review policy between the two agencies. Likewise, for the annual National Accounts series, INEGI uses the most recent ESS data as a reference and adjusts the corresponding quarters (which had already been published) using a benchmark window. This adjustment entails an additional difference between statistics. BM and INEGI will continue to work on this topic.

27. Revise the external debt compilation process to enhance adherence to guidelines in the *BPM6* and the *EDS Guide*, and to ensure consistency with the IIP. (3)

BM has revised the external debt compilation process to enhance the adherence to guidelines established in the BPM6 and the EDS Guide. Consistency of the IIP and the external debt with respect to the guidelines will be achieved once the new domestic presentation of both statistics is published in March 2022. This new EDS statistic enhances the adherence to the EDS Guide, addressing the recommendations about:

a) Intercompany lending;

b) SDR allocation;

The new EDS statistics will reinforce the coherence between the IIP and the EDS. Once published, the old dataset will eventually be removed.

28. Disseminate external debt following the presentations established in the Guide with bridging tables between the external debt published by the BM and the public external debt disseminated by the SHCP. (4)

This recommendation is closely linked with the adherence enhancement to the EDS guide and the BPM6. In this context, the new statistic of external debt that will be published will be disseminated in two tables: i) the first one will correspond to the presentation established by the EDS Guide 2013; ii) a second table will report the external debt divided by private and public sectors (as also established in the EDS Guide 2013); from this table, in addition, the public sector debt presents the adjustments needed to match with the information reported by the SHCP.

29. Disseminate the balance of payments and the IIP with a structure (institutional sectors and financial instruments) consistent with the standard components of the *BPM6*, including additional details considered relevant for the Mexican economy, if needed. (4)

In the first quarter of 2022, BP and IIP statistics –February in the case of the former and March in the case of the latter– will be disseminated with a structure consistent with the standard components of the BPM6, including additional details that are relevant for the Mexican economy.

30. Consider the costs and benefits of discontinuing the publication of the *BPM5* series, taking due account of users' feedback. (4)

At present, a vast majority of users rely on *BPM6* data. Therefore, in February 2022, after having provided advance notice to users in August 2021, BM will discontinue the publication of the BPM5 series. Furthermore, in line with recommendation 14, a structure consistent with the standard components of the BPM6 and additional breakdowns will be published in BPM6 series. The advance notice can be seen here (available only in Spanish):

https://www.banxico.org.mx/publicaciones-y-prensa/balanza-de-pagos/%7BD63D5090-E46A-C86F-0380-183FC649330B%7D.pdf

31. Disseminate a release calendar covering all external sector statistics, including the IIP and external debt. (1)

A release calendar covering BP, IIP, and the EDS is already being disseminated. https://www.banxico.org.mx/publicaciones-y-prensa/balanza-de-pagos/balanza-pagos-comercio-invers.html

32. Expand the information provided about metadata in the methodological notes for the balance of payments and the IIP and update the methodological note for the external debt statistics. (5)

In February 2022, an expanded version of the methodological note for BP and IIP statistics will be published. Based on the recommendations and enhancements of the ROSC evaluation, the updated metadata of the EDS will be reported, hand in hand with the dissemination of the new EDS data. Also, the methodological note of the EDS will be published in the Bank of Mexico's website.

33. Publish press releases for the IIP and external debt statistics, to better promote use of these data among users. (5)

In line with recommendation 14, starting March 2022, a quarterly press release for the IIP will be disseminated. It will include a structure consistent with the standard components of the BPM6 and additional details that are relevant for the Mexican economy.

A press release for the external debt statistics will be published from 2022 and onwards.

INTERNATIONAL MONETARY FUND

MEXICO

REPORT ON THE OBSERVANCE OF STANDARDS AND CODES (ROSC)—DATA MODULE VOLUME III

December 8, 2021

DETAILED ASSESSMENT USING THE DATA QUALITY ASSESSMENT FRAMEWORK (DQAF)

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This report is based on information provided prior to and during a mission conducted during June 7-21, 2021 as well as on a survey of users and publicly available information. The mission team was led by Mr. James W. Tebrake (Assistant Director, IMF Statistics Department) and also comprised Mr. Ethan Wiseman (Expert, Government Finance Statistics), Mr. Eduardo Rodriguez (Expert, Balance of Payments-International Investment Position), Ms. Lisbeth Rivas (Senior Economist (IMF), and Expert, National Accounts).

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Glossary

1993 SNA	*System of National Accounts, 1993*
2008 SNA	*System of National Accounts, 2008*
AGA	Customs General Administration
BM	Bank of Mexico
BIE	The Economic Information Bank
BOP	Balance of Payments
BPM5	*Balance of Payments Manual, fifth edition*
BPM6	*Balance of Payments and International Investment Position Manual, sixth edition*
CCCINEGI	INEGI's Consultation and Marketing Centers
CEMLA	Center for Latin American Monetary Studies
CFE	Federal Electricity Commission
COFOG	Classification of Functions of Government
COICOP	Classification of Individual Consumption by Purpose
CPI	Consumer Price Index
DEH	Government Finance Statistics Department
DGACN	Economic and Agricultural Censuses, Economic Surveys and Administrative Records, National Accounts
DGEE	The General Directorate of Economic Statistics
DOF	Official Gazette of the Federation
DSBB	Dissemination Standards Bulletin Board
DQAF	Data Quality Assessment Framework
ECLAC	The Economic Commission for Latin America and the Caribbean
ENAMIN	The National Microbusiness Survey
ENIGH	National Survey of Household Income and Expenditure
ENOE	The National Survey of Occupation and Employment
ESPC	Professional Career Service
FDI	Foreign Direct Investment
FISIM	Financial Intermediation Services Indirectly Measured
FOF	Flow of Funds
G-20	Group of 20 Economies
GAM	Office of the Manager of Macrofinancial Analysis
GFS	Government Finance Statistics
GFSM 1986	*Government Finance Statistics Manual, 1986*
IFS	International Financial Statistics
IIP	International Investment Position
IMF	International Monetary Fund
IMSS	Mexican Social Security Institute
INDEVAL	Securities Institute
INEGI	National Institute of Statistics and Geography
ISIC	International Standard Industrial Classification of All Economic Activities
ISSSTE	Workers Security and Social Services Institute

LSNIEG	Law of the National System of Information on Statistics and Geography
MS	Monetary Statistics
NAICS	North American Industry Classification System
NFPS	Nonfinancial Public Sector
OECD	Organization of Economic Cooperation and Development
Pemex	Mexican Petroleum
PPI	Producer Price Index
ROSC	Report on the Observance of Standards and Codes
SASE	External Sector Analysis
SE	Secretariat of Economy
SCNM	Mexican System of National Accounts
SDDS	Special Data Dissemination Standard
SHCP	Secretariat of Finance and Public Credit
SII	Integrated Government Revenue and Expenditure Information System
SNIEG	National System of Statistics and Geography
STA	IMF Statistics Department
VAT	Value Added Tax

NATIONAL ACCOUNTS

0. Prerequisites of Quality

0.1 Legal and Institutional Environment

0.1.1 The Responsibility for Collecting, Processing, and Disseminating the Statistics is Clearly Specified

The National Accounts of Mexico are compiled and disseminated by the National Institute of Statistics and Geography (INEGI). The activities carried out by INEGI are regulated by the Law of the National Statistical and Geographic Information System (LSNIEG), published in the Official Gazette of the Federation (DOF) on April 16, 2008 (Last Reform 06/25/2018). Article 52 of the Law states that INEGI is a public organization with technical and managerial autonomy, legal personality and has its own assets, and is accountable for regulating and coordinating the National Statistical and Geographical Information System (SNIEG).

Article 53 of the LSNIEG states that the priority objective of INEGI is to carry out actions aimed at ensuring that the Information of National Interest is subject to the guiding principles set forth in Article 3 of the same Law, which are: accessibility, transparency, objectivity, and independence. Furthermore, the latter Article also establishes that "the SNIEG has the purpose of providing society and the State with quality, pertinent, accurate and timely information, in order to contribute to national development."

In accordance with Article 3 of the Rules for the determination of Information of National Interest, Information of National Interest is defined as the statistical and geographic information that is "essential to know the reality of the country in demographic, economic, social, governmental, public security, justice, as well as geographic, environmental and territorial and urban planning, which is developed based on a scientifically supported methodology and whose purpose is to contribute to decision-making for the design, implementation, monitoring and evaluation of policies necessary for the development of the country."

In addition, article 6 of the LNIESG states that the Information of National Interest "is official and of mandatory use for the Federation, the federative entities, the municipalities and the territorial demarcations of Mexico City, without prejudice to the fact that the Units of the State produce and publish official public information in addition to the Information of National Interest."

Article 4 establishes that the SNIEG has the following objectives: to produce and disseminate information in a timely manner through mechanisms that facilitate its consultation, to promote the knowledge and use of the information, and to preserve it.

The composition of the SNIEG is defined in Article 5 as follows: The National Consultative Council, the National Information Subsystems and the INEGI, which is accountable for regulating and

coordinating the SNIEG (in accordance with Article 52, of the LSNIEG).

Article 59 establishes that INEGI will have as exclusive powers: to carry out National Censuses, integrate the National Accounts system and prepare the National Consumer and Producer Price Indices. Lastly, the article states that the denominations National Census or National Accounts may not be used in the name or in the propaganda of registers, surveys or enumerations other than those practiced by INEGI. Furthermore, the article also indicates that the Institute may produce any other Information of National Interest when so determined by the Governing Board, subject to budgetary availability.

Article 78 of the LSNIEG grants the National Accounts System the status of information of National Interest. The Law is available on the INEGI website at:

https://www.snieg.mx/DocumentacionPortal/normatividad/marcojuridico/LSNIEG.pdf.

INEGI´s Internal Regulation (RIINEGI) (DOF for November 25, 2020) aims to regulate the form and terms in which the Institute will exercise the responsibilities and powers granted by the Political Constitution of the United Mexican States (article 1, RIINEGI), LSNIEG and other laws, regulations, decrees and resolutions of the Governing Board.

The structure of the General Directorate of Economic Statistics (DGEE) has five Deputy General Directorates, specifically, Economic and Agricultural Censuses (DGACEA), National Economic Surveys (DGAEEN), National Accounts (DGACN), Price Indices (DGAIP) and Economic Administrative Registers (DGARAE).

Article 22 of RIINEGI defines the specific responsibilities of the Deputy General Directorate of National Accounts (DGACN), among others:

I. Prepare the System of National Accounts in accordance with national and international recommendations on methodological and conceptual matters;
II. Apply the conceptual standardization between basic statistics and the principles of national accounting in accordance with the conceptual framework of the System of National Accounts and other international guidelines in force for its support and continuous improvement;
III. Promote the dissemination of the products that comprise the System of National Accounts, as well as their respective methodologies, that contribute to the identification of user´s needs and to strengthening the national accounts statistics;
IV. Integrate and update the results of the goods and services accounts, the calculations by institutional sectors, the short-term and regional indicators and the studies on the satellite accounts that make up the System of National Accounts. Operationally, the DGACN consists of four Area Directorates, namely: National Accounts, Satellite Accounts, Short-term and Regional Accounts, and Input-Output.

0.1.2 Data Sharing and Coordination Among Data-producing Agencies are Adequate

In general, data sharing arrangements necessary to compile the National Accounts are good. The data sources to compile the National Accounts, such as censuses, surveys and administrative records, strictly comply with the established schedules for the submission of information. This includes administrative data sources acquired by INEGI (through a formal letter of agreement) from public and private entities.

Furthermore, article 23 BIS from INEGI´s Internal Regulation establishes, as one of the functions of the Deputy General Directorate of Administrative Records, to ensure the production of basic and derived statistics from the linking, analysis and exploitation of administrative records. In this regard, the Deputy General Directorate of National Accounts and Economic Administrative Records, jointly prepare an official letter to obtain information regarding the finances of states and municipalities, thereby ensuring data procurement from sub-national governments through INEGI's state offices.

There is an extensive information exchange between INEGI and various public sector institutions, which provides timely and detailed information for the preparation of the National Accounts. These arrangements include covenants and agreements with the national oil company Petróleos Mexicanos (PEMEX), the Federal Electricity Commission (CFE), the Energy Regulatory Commission (CRE), all branches of the Federal Government, and decentralized agencies—for accounts and balances. And with the Bank of Mexico (BM) for current and financial accounts data for the balance of payments/IIP, and for the catalog of data on financial intermediaries. Data are also sourced from the Agricultural and Fisheries Information Service of the Ministry of Agriculture and Rural Development (SIAP-SADER), and others.

INEGI in conjunction with other statistical producers has established (as prescribed under the LSNIEG) Executive Committees and Specialized Technical Committees (subsystems such as the Demographic and Social subsystem) that play an important role in the coordination of the SNIEG. These subsystems are tasked with overseeing the production, integration and dissemination of Demographic and Social; Economic and Financial, Geographical and Environmental, and Governmental information, as well as information on Public Safety and Justice.

The Specialized Technical Committees are created by agreement of the Governing Board and include representatives of the State Units and INEGI. Currently, there are 36 Specialized Technical Committee including one for Macroeconomic Statistics and National Accounts. The Macroeconomic Statistics and National Accounts Specialized Technical Committee includes representatives from INEGI, the Ministry of Finance and Public Credit (SHCP), the BM, and the Ministry of Economy (SE).

Information needs with respect to scope, coverage, periodicity, response burden and costs are discussed in the meetings of the committees and working groups. Formal meetings are held every six months and communication among members also occurs between meetings.

As a basis for good coordination among agencies, section I of the LSNIEG establishes the rights and obligations of the respondents of the System. In particular, article 40 states: "The respondents of the

System who are required to provide statistical or geographic data, must be aware of:

I. The mandatory or optional nature of their responses, as appropriate,

II. The obligation to provide truthful answers, and the consequences of falsehood in their responses to the questionnaires,

III. The possibility of exercising the right of rectification,

IV. Confidentiality in the administration, handling and dissemination of their data,

V. The way in which the Information will be disclosed or provided, and

VI. The deadline for providing the data, which must be set according to the nature and characteristics of the information to be delivered.

References to each of the above items (I-VI) must appear in the questionnaires and documents used to collect statistical or geographical data.

0.1.3 Individual Reporters' Data are to be Kept Confidential and Used for Statistical Purposes Only

Section I in Chapter V of the LSNIEG, on the Rights and Obligations of Respondents of the System, guarantees the confidentiality of the data supplied to INEGI, stipulating that these data may only be used for statistical purposes. Article 37 in the Law establishes that "*the data provided for statistical purposes of the Respondents of the System to the Units in terms of this Law will be strictly confidential and under no circumstances may be used for any purpose other than statistical.*"

Article 38 of the Law states that "*data and reports provided by the Respondents of the System for statistical purposes and derived from administrative records, will be handled observing the principles of confidentiality and secrecy of data, so they may not be disclosed in any nominative or individualized case, nor will they serve as evidence before judicial or administrative authority, including the prosecutor, in or out of court.*" The article also notes that when the information referred to in the previous paragraph has to be disclosed, it must be aggregated in such a way that it is not possible to identify the Respondents of the System and, in general, the natural or legal persons that are the subject of the information.

As an autonomous organization, INEGI is also regulated by the General Law of Administrative Responsibilities (LGRA) (DOF from July 18, 2016, last Reform on 04/13/2020), whose Article 49 in its Section V, compels public servants to "*Register, integrate, safeguard and care for the documentation and information under their responsibility, due to their employment, position or commission, and prevent or avoid their use, disclosure, theft, destruction, concealment or improper deactivation.*"

Moreover, Article 52 states that "*Public servants will commit bribery if by reason of their functions, they demand, accept, obtain or intend to obtain, on their own or through third parties, any benefit not*

included in their wage, which could consist of money; values; movable or immovable property, even through disposal at a price that is well below the market price; donations; services; jobs and other undue benefits for them or for their spouse, blood relatives, civil relatives or for third parties with whom they have professional, labor or business relationships, or for partners or companies in which the public servant or the aforementioned persons are part."

All questionnaires used for censuses, surveys and special research by INEGI make clear reference to the confidentiality requirements of the information. A section located on the first page states: "*In accordance with the provisions of Article 37 of the LSNIEG currently in force: data provided by the respondents of the system to the units for statistical purposes, in accordance with the law, will be strictly confidential and in no case may they be used for any other purpose than for statistical purposes*." Article 38 states that "*data and reports provided by the respondents of the system or derived from administrative registers for statistical purposes will be handled with due regard to the principles of confidentiality and privacy and may not, under no circumstances, be disclosed individually or by name, nor used as evidence before administrative or fiscal authority, in judicial or other procedures.*" Article 46 in Chapter VI states: "*The Units shall be obliged to respect the confidentiality and reserve of the data the System´s Informants provide for statistical purposes.*"

Article 104 of the LSNIEG defines the violations attributable to INEGI officials or officials of the system units as follows: "*The disclosure of confidential data; The violation of the secrecy of industrial or commercial nature or of any other type, or the supply of data provided by the Informants of the System in a personal or individualized way*" (paragraphs I and II). Consequently, Article 108 of the Law establishes administrative sanctions for those who disclose confidential data: "a fine of between 2,000 to 30,000 wages at the time of committing the offense."[1]

In addition, the proposal for the regulatory provision of the Policy for the Management of Confidentiality in Statistical and Geographic Information is currently open for Public Consultation. This document is a regulatory proposal for the entire National System of Statistical and Geographic Information, which aims to establish general measures that must be implemented to manage the Statistical Confidentiality of data provided by the respondents of the System, in accordance with the provisions of Article 47 of the SNIEG Law.

Article 75 of the LGRA establishes mechanisms for imposing sanctions on public servants for non-serious administrative offenses, such as preventing or avoiding the use, disclosure, theft, destruction, concealment or improper use of the documentation and information under their protection. The mentioned mechanisms will consist of a public or private warning; suspension of employment, position or commission; dismissal from the job, position or commission, and temporary disqualification to perform jobs, positions or commissions in the public service and to participate in acquisitions, leases, services or public works.

[1] Article 110 in the Law of the SNIEG states that for the effects of the Law, wage is understood as the current minimum wage in force in Mexico City at the time of the offense.

INEGI's Professional Career Service (SPC) aims to select and recruit the best applicants to fill vacant and newly created positions. The SPC framework covers hiring (entry), training, performance evaluation, incentives and separation – ensuring that INEGI has the staff required to produce quality national accounts.

Furthermore, in the resolution establishing the Statute of the Professional Career Service (ESPC) at INEGI (DOF of December 24, 2020), a specific disciplinary provision is set forth, which specifies measures for non-compliance with the current legislation, in particular Section V in Article 39, which establishes that one of the causes of separation will be the repeated and unjustified breach of any of the obligations established by the Statute or other applicable regulations.

The ESPC notes that INEGI employees must adhere to the principles of confidentiality and privacy with respect to respondent´s data provided for statistical purposes, as well data confidentiality obtained from administrative registers, and the application (in the performance of their functions) of the SNIEG Code of Ethics.

Article 38 (2) in the LSNIEG states that "*When the information referred to in the previous paragraph has to be disclosed, it must be aggregated in such a way that it is not possible to identify the Informants of the System and, in general, the natural or legal persons object of the information*."

Personnel assigned to National Accounts periodically verify and ensure the non-disclosure of confidential data. The risk of disclosure is mitigated by INEGI's decision to only release data at the three- and four-digit level of the North American Industry Classification System (NAICS).

Data provided by respondents is kept in custody of the officials responsible for its management and is not displayed to the public or to the rest of the INEGI staff. Access is limited to only those authorized to perform calculations with the data, and they are reminded in writing of the confidential nature of the data. In general, INEGI staff are fully aware of the penalties for disclosing confidential data.

The security measures to protect the facilities are under the responsibility of the security personnel who inspect all individuals and items that enter and leave the facilities. The DGACN makes extensive use of Microsoft Windows Server 2012 R2 network platform both locally and nationally, all services use Windows, for email Office 365, One Drive, Teams, Microsoft Exchange and Microsoft SharePoint, Google Chrome for Internet, Yammer, Intranet and Extranet INEGI. The DGACN uses both specialized and off-the-shelf software such as Oracle, R, Python or SQL Servers. The DGACN has 284 microcomputers connected via a local network requiring an access code.

Users of both local and network microcomputers maintain information security by storing it on hard drives or in the corresponding server space. Weekly backups are made to external drives.

Network servers and their backups are kept in restricted access areas, in the network administrator´s offices, in Area Directorates. A backup is also secured away from the facilities, in the event of an accident in the building, under responsibility of the Area Director.

Confidential information is retained for five years at INEGI´s storage facility located outside the headquarters. After the five-year period it is sent to the national archives where it is kept for another five years. The information is destroyed after 10 years.

0.1.4 Statistical Reporting is Ensured Through Legal Mandate and/or Measures to Encourage Response

The legal powers of INEGI to collect information are established in Chapter V of the LSNIEG, referring to the rights and obligations of users and respondents of the "*Geographic Information Systems and National Statistics*." Article 45 defines the obligations for respondents, while Article 40 requires respondents to provide the requested information in a truthful and timely manner. Article 45, first paragraph states that "*The Respondents of the System shall be compelled to provide data and reports requested by the competent authorities for statistical, census and geographic purposes, and shall provide support thereof.*"

There is no record of conflicts between the legal provisions for supplying information and those protecting the respondents. Despite some discrepancies in the legislation, they do not affect the quality of the National Accounts estimates. For example, the Banking Secrecy Law protects individuals and legal entities at the individual level, but aggregated information is provided to INEGI. A similar situation has occurred with the cancellation of the decree for the promotion and operation of goods for processing companies (maquiladoras) and the change in the mining legislation, which previously required companies to submit monthly and annual information to the Ministry of Economy (SE). When the new mining law was adopted and the Maquiladora Industry Promotion Program was cancelled, INEGI decided to carry out the monthly collection with the mining units in order to maintain the regular and periodic flow since 2000. Similarly, with the new decree for the promotion of the manufacturing industries, maquiladoras and export service industries, INEGI worked with the Ministry of Economy to encourage companies to submit monthly information.

Chapters I and II of Title IV of the LSNIEG detail the powers of INEGI to investigate administrative misconduct respondents of the system and administer sanctions if required. Article 48 estates that "*The Institute, in the exercise of the powers conferred by this Law, may carry out inspections to verify the authenticity of the Information, when the data provided is incongruent, incomplete or inconsistent.*" Article 49 indicates that verification inspections must be carried out under the written order of the Institute: Paragraph I (d) establishes that "*The information subject to verification, as well as the corresponding documentation must be displayed by the System Informant in the diligence.*"

The law also establishes penalties for rejecting or falsifying information. Article 106 imposes a fine of according to the infraction and who committed the infraction. Despite the existence of legal provisions for obtaining information and sanctions for non-compliance, these have seldom been applied: the intention is to encourage voluntary reporting, giving respondents detailed explanation on the use of their information, its confidential nature and its importance for the country in terms of quantifying and monitoring economic activity.

The reporting burden on respondents is a concern for the DGACN, which has taken measures to minimize it. When designing questionnaires care is taken to request only the most significant information. INEGI staff is available to help respondents report their data. Instructions for recording the requested data are provided, with a glossary of terms, and survey responses can be submitted electronically. In addition, a point of contact is included in the surveys. In the case of public and private organizations providing administrative records to various areas of National Accounts, cooperation agreements have been established to avoid duplication of efforts and to include all information requirements in a single request and through a single point of contact (single window).

INEGI encourages cooperation from respondents by highlighting the importance of reliable and timely information and the link between the quality of statistics and effective policy. INEGI also provides respondents information on the basic and derived statistics it produces and on the procedures for consulting the statistics. INEGI is open to requests for information by respondents when appropriate, without detriment to the principle of confidentiality.

0.2 Resources

0.2.1 Staff, Facilities, Computing Resources, and Financing are Commensurate with Statistical Programs

The human and financial resources dedicated to National Accounts are adequate. The number of statisticians with experience in National Accounting is sufficient to meet the needs of users. The DGACN has the support of all the areas that produce economic statistics for INEGI.

The DGACN comprises 284 staff positions, 156 are Professional Career Service positions and 128 temporary positions. Fifty-five (55) percent have a fixed-term contract, reflecting their participation in fixed-term projects such as the change in the base year of the national accounts (CAB). Liaison personnel are hired to collaborate in the tasks carried out by the CAB in parallel with the recurrent calculations, under the supervision and direction DGACN management. The DGACN management team consists of one Deputy Director General, four Area Directors, 26 Deputy Directors, and 60 Heads of Department. Since 2010, wages have been increased annually in accordance with inflation and merit considerations.

The academic level and personnel training are considered adequate. The DGACN has 193 post-secondary graduates (Bachelor's degree) representing 71 percent of the total staff; 57 hold a master's degree representing 21 percent of the total staff, and one person holds a doctorate.

All INEGI staff are enrolled in a continuous training program that keeps them updated on various topics, from statistics and computing to National Accounts. The training program is regulated by the ESPC, which establishes that INEGI carries out activities to promote professional development and continuous improvement of skills, in accordance with the needs of the specialization areas. The training program includes short courses, training and degree cycles, and is facilitated by permits, special days, scholarships for carrying out specialized studies, undergraduate and graduate degrees.

Moreover, National Accounts officials attend international courses, seminars and conferences for training purposes. Visits are organized yearly to various international organizations (e.g., Organization for Economic Cooperation and Development (OECD), the Economic Commission for Latin America and the Caribbean (ECLAC), the International Monetary Fund (IMF), and the Center for Latin American Monetary Studies (CEMLA)).

The DGACN has an effective National Accounts on-the-job training program. All areas and all working groups, including the DGACN Sub directorates and Area Directorates, are aware of the general process of National Accounts and hold group sessions to discuss the methodology and propose improvements, while seeking ways to streamline and simplify procedures. The *1993 System of National Accounts (1993 SNA) and the 2008 System of National Accounts (2008 SNA)* are available to staff in Spanish and English.

The accumulated experience of the DGACN staff extends over many years. National Accounts staff stability in the Institution can be seen in the following table:

Time in service	Percentage of staff
1 to 10 years	56.3
11 to 20 years	20.0
21 to 30 years	23.2
31 years and more	10.8

The average seniority of the staff is 12 years. The stability in the staffing of the DGACN can be explained, among other factors, by the ESPC, which guarantees job security and serves to retain trained personnel. The ESPC also includes a staff incentive system, ranging from operational staff in extra-budgetary positions to Area Directors. Operational technical staff compete for the "employee of the month" award and are eligible for an annual cash bonus and/or an additional 10-day vacation if they meet established goals.

The computer resources of the DGACN are considered adequate. The DGACN has a computer for every employee. Furthermore, the equipment is updated every five years, and new equipment is added as new staff are hired. The DGACN uses internally developed applications (database administration programs, compiling programs, programming languages) as well as commercially available products (office suites and operating systems) to compile the System of National Accounts. In addition, the staff has been working on the exchange of statistical data and metadata (SDMX) to optimize the data exchange. National Accounts staff have developed computer programs to automate, simplify and streamline work procedures. A second network server was installed to facilitate the production of Short-Term macroeconomic statistics and Regional Accounts.

The financial resources available for National Accounts are considered adequate and sufficient in light of the authorized work programs. Funding is reasonably secured for the identified needs of the statistical program and the funding horizon is modifiable for planning emerging statistical developments. Budgeting practices provide clear information to financial authorities. INEGI has adopted budget austerity measures to reduce current expenses (telephone calls, travel, allowances,

electricity, water, and fuel among others) without compromising the main objective of completing its mandatory work programs. Sixteen staff members were recruited to compile quarterly sectoral accounts to address recommendation 8 of the second phase of the G-20 data gaps initiative.

0.2.2 Measures to Ensure Efficient Use of Resources are Implemented

INEGI applies an annual Performance Evaluation Form to its operational technical staff. The evaluation covers the goals achieved, quality, timeliness and reliability of statistical products and work programs. In addition, there is a performance evaluation applied to all Public Career Servant staff, where training plays a relevant role since it represents 35 percent of the total value of the grading. The remaining 65 percent corresponds to compliance with institutional goals, individual goals and performance factors disaggregated by position. The objective is for public servants to ratify the ownership of their position as career public servants through their performance.

INEGI seeks to make more efficient use of resources by applying consistent and standardized concepts both in the areas that produce statistics and in the DGACN. Within the DGEE, in conjunction with all the DGA's, work meetings are held to discuss and standardize implementation of international concepts and recommendations. For example, the DGACN and DGARAE collaborated with DGACEA staff in the collection of data on the energy and banking sectors.

The work programs and procedures are periodically reviewed by the DGEE General Director to verify compliance with organizational objectives and identify areas for improvement. A notable recent advancement is the adaption and standardization of INEGI procedures and processes to align with the UNECE Generic Statistical Business Process Model (GSBPM). These changes have been codified in the latest update of the organization manual dated April 2021 and in the procedures manual dated February 13, 2020.

The National Accounts division is aware of the importance of the efficient administration of financial resources and prioritization of activities. Management assigns resources to high priority activities, within the current budget and internal limitations. When required, management negotiates for additional resources to assist with project on information of national interest. Innovations that reduce time and costs have been introduced. The systematization of processing and compilation has started, utilizing statistical and database software packages. Previously, much of this work was undertaken using spreadsheets. The new approach reduces errors and saves time and resources, and reduces costs (such as paper costs, printer cartridges and computer time).

IMF experts that visited Mexico in 2002, 2005, 2006, 2008, 2009, and 2014 made recommendations for improving the methodology and compilation systems of the Supply and Use Tables (SUT) and the 2003 and 2008 Input-Output Matrix, the new National Accounts annual series, as well as the new quarterly series. IMF recommendations were implemented as available statistics allowed. In addition, the DGACN participates in technical meetings with international organizations, such as the United Nations, IMF, OECD, World Bank, and ECLAC, and responds transparently to questionnaires on national accounting practices.

0.3 Relevance

0.3.1 The Relevance and Practical Utility of Existing Statistics in Meeting Users' Needs are Monitored

There is a portal on the INEGI´s website that provides users with a permanent and open communication channel to submit requests for information, access methodologies, and connect with staff to discuss conceptual issues. Furthermore, specialized committees have been established as discussed in 0.1.2.

As prescribed by article 88 of the LSNIEG, INEGI carries out public consultations on information of national interest. For example, the DGEE conducted public consultations on the "Change of Base Year 2008 and 2013 for the SCNM." The Public Consultations on the "Change of Base Year 2008 and 2013 for the SCNM" set a precedent among public entities that produce data and specialized users of macroeconomic indicators. The public consultation permitted the DGEE officials to explain and discuss the benefits of the project and how users would need to adapt their processes and analysis to take advance of the revised data. This process will be used to consult on the change of base year from 2013 to 2018 (scheduled to be conducted in 2021).

INEGI staff attend meetings with international counterparts as a means of staying informed about National Accounts conceptual and methodological developments. Over the last several years INEGI staff have participated in meetings organized by the UN, IMF, OECD, and ECLAC.

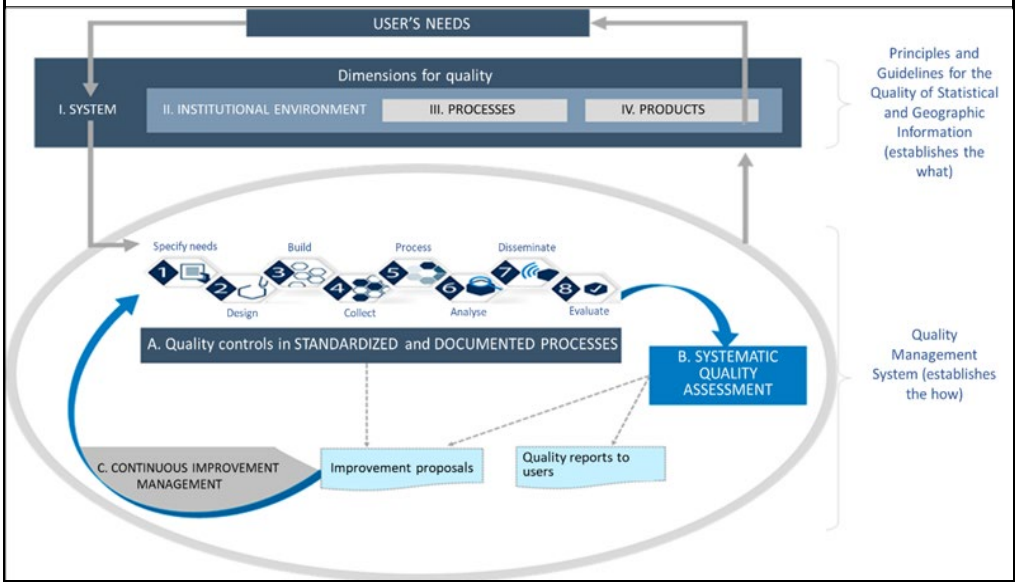
Section XIII in Article 38 of the RIINEGI establishes that the General Directorate of Liaison and Public Service of Information conducts user satisfaction exercises. This Directorate recently conducted a user satisfaction survey with national accounts users of the INEGI website. The assessment resulted in the changes that have improved the accessibility of National Accounts.

0.4 Other Quality Management

0.4.1 Processes are in Place to Focus on Quality

Article 3 of the LSNIEG states that the purpose of the SNIEG is to provide society and the State with quality, accurate, truthful and timely information, in order to contribute to national development. At INEGI, the quality of statistical products is assured through the Quality Management System (illustrated in the following figure).

Figure 1. Comprehensive Scheme for Quality Assurance



Based on international experience, literature on quality management and existing regulations, the Quality Management System is designed around three main elements:

- ✓ Satisfaction of users' needs - the central axis of the framework.
- ✓ Principles and Guidelines for the Quality of statistical and geographic information - which defines the dimensions, guidelines and principles that will guide conceptualization and measurement of statistical and geographic information.
- ✓ Strategies for Institutional Quality Management - which establish the means, mechanisms and activities through which quality assurance will be managed.

For this System to work, it is essential to link the quality dimensions (organizational culture and structure, planning and leadership, attention and coordination with the State Units) with INEGI´s operations: human, financial, material and information technology resources, operating procedures, regulations, technical standards, and methodologies. The Quality Assurance Committee is empowered to coordinate the actions undertaken to ensure the quality of statistical and geographic information. Its work is overseen by the President and the General Directors. This Committee is in charge of issuing:

- ✓ the Conceptual and Governing framework for Quality Assurance of Statistical and Geographic Information;
- ✓ the Principles and Good Practices for the Statistical and Geographic Activities of the SNIEG;
- ✓ the Regulation on Quality Assurance for INEGI´s Statistical and Geographic Information;
- ✓ the Manual on the Integration and Operation of the Quality Assurance Committee;
- ✓ the Institutional Quality Policy, the Technical Standard for the Statistical and Geographic Information Production Process, and

- ✓ the Guidelines for the Process of Management Changes in the Statistical and Geographic Information Programs.

The Quality Assurance Committee is also in charge of approving manuals and guidelines, indicators, reports, evaluations and, instilling a culture of quality in the Institute. The 2020 Outcome Report by the Committee describes the main progress in the medium-term goals for each of the quality assurance strategies defined by this committee. This document is available at the following website:

https://extranet.inegi.org.mx/calidad/indicadores-de-calidad-y-evaluaciones/

A key governance feature of the SNIEG is the National Advisory Council. The National Advisory council consist of the INEGI President, representatives of State Secretariats, the Judiciary, the different Chambers of Congress, the Federal Entities, and BM. Additionally, other public institutions and social and private institutions may be invited to board meetings when appropriate. The council gives its opinion on statistical projects and programs and proposes topics for discussion. The meetings of the National Advisory Council contribute to continuous product improvement, and to offer views—from the user's perspective—on the relevance of new proposed projects and programs.

Program relevance is maintained through the SNIEG planning process, which includes the development of a twenty-four-year long-term strategic plan, a six-year national plan, and an annual statistical improvement plan with clear objectives and goals to expand statistical products and implement international standards. These plans are approved by INEGI´s Governing Board.

Several INEGI processes or activities have been granted ISO standards. The monthly survey on non-financial private services has been certified ISO 9001-2000 and the National Price Indices have been certified ISO 9001-2015. Staff training programs emphasize the importance of quality and give staff a good understanding on how quality can be achieved.

0.4.2 Processes are in Place to Monitor Quality During the Planning and Implementation of the Statistical Program

With the implementation of the Technical Standard for the Statistical and Geographic Information Production Process in 2018, uniform and comparable mechanisms were established to improve the quality of SCNM products, mitigate risks, assign responsibilities, and implement common statistical business process terminology. The Standard enabled DGACN to document business process in a consistent manner across multiple program areas (Economic Activities, Institutional Sectors and the Thematic Accounts). The documentation process is facilitated by the Evidence Registration System (Ptracking) which was created to assist with the implementation of the MPEG Standard.

The quality monitoring processes are based on indicators that evaluate progress in work programs at monthly, quarterly and annual intervals. Survey response rates are calculated, and assessments of revisions and timelines are carried out. There is variety of statistical accuracy indicators derived for National Economic Surveys and administrative records which are considered by SCNM staff when

compiling the national accounts. Accuracy indicators frequency consulted in include response rates, coverage rates, non-response at the unit and variable level, and coefficients of variation.

Appropriate measures have been taken to ensure that the statistics produced by INEGI are subject to review by national and international organizations. For example, INEGI requested the IMF to develop a Report on the Observance of Standards and Codes (ROSC) to assess the change in the base year and the implementation of the *2008 SNA* in the SCNM.

The responsibilities of the DGEE include evaluating the quality and coverage of economic information and promoting continuous improvements in economic statistics. The DGEE specific responsibilities include the development of classifications (NAICS 2018 and 2023) and conceptual frameworks. The DGEE also conducts studies on various economic sectors and emerging issues such as the impact of globalization and digitalization on the production of statistics, in accordance with Section VIII in Article 20 and Section IX in Article 21 of the RIINEGI.

Regarding the quality of information provided to users, efforts are made to maintain high levels of reliability in the figures, which are examined by international organizations.

1. Assurances of Integrity

1.1 Institutional Integrity

1.1.1 Statistics are Produced on an Impartial Basis

Mexico recognizes the importance of ensuring the professional independence of the personnel who compiles statistics. The ESPC of INEGI (DOF of December 24, 2020) promotes and encourages staff development and ensures INEGI has an agile workforce, hires the best people available. Key principles of the ESPC include legality, efficiency, objectivity, quality, impartiality, equity, independence, and competence based on merit (Article 3).

In accordance with Articles 67, 68 and 69 of the LSNIEG, the highest authority of INEGI is the governing board, which is made up of five members appointed by the President of Mexico with the approval of the Senate chamber, one of which is appointed president of INEGI and has the responsibility of presiding over the INEGI Governing Board. Article 68 establishes that the mandate of the president of INEGI will be six years and that of the vice-presidents of the board of directors will be eight years. The mandate of the president of INEGI starts on January 1 of the fourth calendar year of the tenure of the president of Mexico. The mandate of the vice-presidents of the governing board will be extended at intervals of two consecutive years from January 1 of the first, third and fifth years of the mandate of the president of Mexico. The members of the board of directors may be selected for the position up to two times and will hold their positions only during the designated time. The members of the Governing Board can be selected for the position up to two times and will occupy their positions only during the designated time.

Title 3, on the organization and operation of the institute, Sections I and II of the LSNIEG foresees the organization of INEGI, as well as the requirements that the members of the governing board must meet, who must be distinguished professionals in statistical matters, geography or economics, and must have served for at least five years in a high-level position in the public or private sector, or be a recognized academic in these fields.

Hiring and promotion of staff is based on professional competence. Professional competence is monitored and assessed through examinations and contests for recruitment and promotion. The ESPC fosters training ensuring staff develop the skills they need to carry out their work at INEGI and advance their careers. Meetings, conferences, and presentations are frequently organized with academics from public and private universities, consultants, industrial representatives, specialized journalists, officials from all levels of government to explain new National Account products.

To project the professional independence and reputation of INEGI, National Accounts publications are reviewed and validated by the Directorate of the DGACN and the General Director of Economic Statistics, responsible for the dissemination of the products to ensure they meet INEGI technical and publication standards. For its staff, INEGI promotes a research program to generate new data and prepare articles and papers for the magazine: "Reality, Data and Space" ("Realidad, Datos y Espacio"). The goal is to provide data to users in a friendly manner.

1.1.2 Choices of Sources and Statistical Techniques, as well as Decisions About Dissemination, are Informed Solely by Statistical Considerations

The choice of sources and methods is governed solely by statistical considerations and by guidelines and recommendations issued by international organizations. The responsibility for censuses and survey programs are in the purview of the Deputy General Directorate of Economic and Agricultural Censuses and the Deputy General Directorate of National Economic Surveys. The Directorate is in charge of ensuring quality, timeliness, adherence to standards and managing response burden.

The Deputy General Directorate of Economic Administrative Registers is responsible for collecting data from State Secretariats, public and private companies not collected by INEGI surveys. The Directorate establishes agreements with data providers outlining the provision of information, taking into account that the data provided meet INEGI's standards for quality, homogeneity, comparability, and timeliness.

The Deputy General Directorate of Administrative Records is responsible for linking censuses, surveys and administrative records such as Exports by State and the Profile of Export Manufacturing Companies. Additionally, it provides the National Accounts program estimates of the production of light and heavy vehicles, an input for the calculation of INEGI's short-term indicator program.

INEGI's practice is to provide methodologies and technical explanations of its measurements in publications and on its website, underscoring the professional independence of its staff and adherence to international standards. Article 88 of the LSNIEG establishes that when INEGI develops new products or implements new methodologies, it must consult with the public prior to

implementation. The decisions that govern the disclosure of information are based solely on statistical considerations as defined in the National Economic Information Subsystem, specifically in Article 24 of the LSNIEG.

1.1.3 The Appropriate Statistical Entity is Entitled to Comment on Erroneous Interpretation and Misuse of Statistics

As prescribed by the LSNIEG, INEGI has the responsibility to comment on errors of interpretation or the misuse of the statistics it generates. INEGI issues press releases explaining its position on misinterpretation, which are published on the INEGI website.

INEGI closely monitors press and other media coverage and prepares executive summaries that are shared across the organization and are used to monitor on erroneous interpretations or the misuse of statistics in the media and other forums. The Specialized Technical Committee on Macroeconomic Statistics and National Accounts through the Public Finance Working Group (which includes membership from the SHCP, BANXICO and the Ministry of Economy) monitors the interpretation and use of Public Finance Statistics.

1.2 Transparency

1.2.1 The Terms and Conditions Under Which Statistics are Collected, Processed, and Disseminated are Available to the Public

The INEGI website includes a link to the LSNIEG, which informs the public about the confidentiality and professional standards of the INEGI, its President and Governing Board. The LSNIEG also includes the code of conduct under which official statistics are compiled and disseminated, the approval process for the dissemination of data, and the procedures for hiring and removing the head of the data-producing agency. The INEGI website (http://www.inegi.org.mx) contains an electronic mail address for users to send additional requests and suggestions. INEGI publications contain information about the INEGI website, its address, email address and telephone number. In addition, INEGI has Information Centers that provide information to the public. (atencion.usuarios@inegi.org.mx)

1.2.2 Internal Governmental Access to Statistics Prior to Their Release is Publicly Identified

INEGI's autonomy guarantees that no government authority has access to its statistics before they are released to the public. Therefore, no government unit or public servant has access to the data before publication. In the case of market conditions reports, on the day of publication a note is sent to the President of Mexico after the report has been released to the press and the general public on the pre-announced date through the INEGI website. In accordance with the INEGI's Standard for the Dissemination and Promotion of Access, Knowledge and Use of Statistical and Geographic Information, press releases indicate that data have been prepared under the responsibility of INEGI, although it is not explicitly indicated that the approval of the results rests exclusively with INEGI.

1.2.3 Products of Statistical Agencies/Units are Clearly Identified as such

INEGI is an autonomous body in technical, management and budgetary matters, and with its own assets and liabilities. Determination of the content of the System of Accounts and National Censuses, as well as the Price Indices, are the exclusive responsibility of INEGI and, furthermore, the term "National Census" or "National Accounts" can only be used by INEGI. The data are published in a press bulletin that bears the INEGI logo and clearly indicates that the information was prepared by INEGI. INEGI also releases select information on Facebook, Twitter and through its RSS feed when the press bulletin is published.

INEGI's policy is to disseminate its annual publications in a standard format, in which the presentation, titles, colors, typography, logos, etc. are consistent. In general, hardcopy publications have been changed to electronic publications following a set of normative guidelines for publication. In the case of joint publications with other institutions, the contribution of each one is clearly identified. Joint publications bear the logos of the participating institutions, in accordance with the editorial standards of INEGI. In addition, the Federal Copyright Law requires that the sources of information be cited upon publication.

1.2.4 Advance Notice is Given of Major Changes in Methodology, Source Data, and Statistical Techniques

Any substantial change in data sources and/or methodology is announced in advance through various communication channels (e.g., website, meetings, seminars, and publications). These announcements include information specifying the sources and methods implemented and whether the data is preliminary or revised.

When there is a change in the base year of the National Accounts, the most recent methodological standards are adopted. A public consultation, highlighting the scope, conceptual and methodological changes is carried out before the changes are made. This public consultation includes presentations to public and private institutions, universities, and ministries, and with the press and other media (art. 88 LSNIEG).

1.3 Ethical Standards

1.3.1 Guidelines for Staff Behavior are in Place and are Well Known to the Staff

INEGI has established (by virtue of Article 7 of the LSNEIG) a Code of Ethics that regulates the standards of conduct that must be met by all individuals who carry out statistical and geography related activities within SNIEG. Key elements of the code include quality; excellence; cooperation; legality; transparency; confidentiality; equality; integrity; respect; responsibility; solidarity; commitment; learning; leadership and accountability. To ensure all staff are aware of and comply with the Code of Ethics, INEGI has developed the online course *Know your Public Servant Standard*, which is mandatory for all workers. This course is fully supported by all levels of management. When onboarding new staff, INEGI informs them of their rights and obligations as employees and makes

sure that they become familiar with the organization and its culture of confidentiality and quality. Daily practices and the quality process within INEGI constantly remind staff of the obligation to comply with existing standards.

2. Methodological Soundness

2.1 Concepts and Definitions

2.1.1 The Overall Structure in Terms of Concepts and Definitions Follows Internationally Accepted Standards, Guidelines, or Good Practices

The *System of National Accounts 2008* as well as the methodologies and guidelines derived from this *System* forms the basis of the National Accounts.

2.2 Scope

2.2.1 The Scope is Broadly Consistent with Internationally Accepted Standards, Guidelines, or Good Practices

INEGI publishes annual, quarterly, and monthly national accounts estimates. The latest National Accounts benchmarks are for the reference year 2013. Supply and use tables are published annually at current and constant prices (2013=100) and encompass estimates of GDP at current and constant prices by the production approach, by the expenditure approach and by the income approach. The supply and use tables show the origin and use of products by economic activity for 259 four-digit NAICS branches. Institutional sector accounts (i.e., the production account, income account, capital account, financial account, balance sheet account) are also compiled annually and are available for the entire economy for the period 2003–2019.

On September 2, 2020, INEGI published Quarterly Institutional Sectors Accounts (ISA). These estimates are available from the first quarter of 2008 to the current period. The ISA permit INEGI's users to analyze income flows, savings and lending and borrowing across institutional sectors, financing and the resulting change in stocks.

The methodology followed is consistent with the *System of National Accounts 2008* and the *IMF's Quarterly National Accounts Manual 2017*. The sectoral accounts are published approximately 155 days after the end of the reference quarter. The dissemination dates are found in the dissemination calendar of statistical and geographic information and of National Interest.

The Quarterly ISA comply with recommendation II.8 of the Second G-20 Data Gaps Initiative (DGI). INEGI fully complies with the G-20 ISA minimum reporting templates and largely complies with the enhanced reporting templates. To achieve the enhanced reporting requirements INEGI needs to add a few additional breakdowns of financial assets.

The Quarterly Accounts include GDP estimates at current and constant prices (2013=100). Estimates are compiled according to the production approach, expenditure approach, and income approach. The estimates originate from balanced Supply and Use Tables.

INEGI compiles a monthly volume index of economy-wide activity (*Global Indicator of Economic Activity*) and two monthly indicators of aggregate demand: private consumption in the domestic market and gross fixed capital formation. INEGI also publishes: Culture, Economy and Ecology, Non-Profit Institutions, Health, Unpaid Household Work, Housing, and Tourism satellite accounts.

National Accounts are consistent with the *2008 SNA* concepts of territory and residency (e.g., Mexican government offices abroad, boundary areas, Mexican border workers, and residents who work abroad for less than one year). The production boundary is consistent with the *2008 SNA* definitions, with some exceptions reflecting data limitations.

INEGI compiles estimates of own-account production of goods for own final consumption. These estimates are produced using indirect methods that draw on inferences made from the National Survey of Household Income and Expenditure (ENIGH) and the National Survey of Occupation and Employment (ENOE). Production generated by illicit activities is not included in its entirety; only the trade of some illegal goods and prostitution are included.

The coverage and classification of assets is generally in accordance with the *2008 SNA*. These assets include national defense expenditures on construction and equipment that can potentially be reserved for civilian use. Assets also include work-in-progress for major agricultural products and for perennial crops. A lack of adequate information prevents inclusion of estimates of valuables and historical monuments. As required by the *2008 SNA*, production for self-consumption of capital goods is included.

Partial estimates of Intellectual Property Products are included in the National Accounts. Information on intellectual property assets such as patents, brands and industrial processes is incomplete. The 2009 economic censuses captured qualitative information on the register and development of patents and payments of royalties for using patents. These supply-side data are confronted with data on payment of royalties in the annual surveys to derive estimates of research and development.

Original entertainment products such as production of movies (512111) and music recording (512210) are included. Production of computer programs (541510) was captured only when these were for sale to third parties: the production of programs for internal use within the business is not sufficiently identified.

Own-account research and development gross fixed capital formation is not identified separately, and expenditures on this activity are reflected in intermediate consumption for the principal activities. INEGI staff is reviewing the data from the Research and Technological Development Survey (ESIDET) 2017 carried out in collaboration with the Council and the National Science and Technology Council (CONACYT) for 2008, 2010, 2012, and 2017 with the goal of recording own-account research and development as a capital asset at some point in the future.

Financial leasing is the most common way of financing the acquisition of capital goods. Significant transactions within the public sector, specifically in the energy sector (Investment Projects with Deferred Impact on Expenditure) and through financial intermediaries have been included in the accounts, with the recording of the corresponding items in the capital and financial accounts.

Mineral exploration is explicitly included in oil, gas exploration and drilling; the 2014 Census reports minimal information for mining activities. Regarding subsoil reserves, INEGI has prepared estimates of proven crude oil reserves, but not of mineral reserves. Water is not yet measured as an economic asset, but INEGI has estimated the part of the land that is not occupied by buildings and structures.

2.3 Classification/sectorization

2.3.1 Classification/sectorization Systems Used are Broadly Consistent with Internationally Accepted Standards, Guidelines, or Good Practices

The classification of institutional units, economic transactions and other flows are consistent with the recommendations of the *2008 SNA*. The classification of economic activities is based on the 2013 NAICS, which is a classification system prepared and adopted jointly with Canada and the United States and has a level corresponding to the International Standard Industrial Classification of all activities (ISIC) Rev.4. The 2013 NAICS includes 1059 industries, 614 subgroups of industries, 303 groups of industries, 94 subsectors and 20 sectors. INEGI is using the 2019 Economic Census to introduce and adopt the 2018 NAICS. For the base year 2013, the product classification implemented is a hybrid between the census products and the Central Product Classification (Ver. 2.0) used for the coding of products and raw materials and it is consistent with international recommendations. Household consumption expenditures are classified according to the "Classification of individual consumption according to purpose" (COICOP), while public consumption is classified according to the classification of government functions (COFOG).

2.4 Basis for Recording

2.4.1 Market Prices are Used to Value Flows and Stocks

SCNM records all transactions at current market prices at the time they are carried out in accordance with the principles established in the *2008 SNA*. Production is calculated at basic prices, while intermediate consumption is calculated at purchaser prices, excluding the deductible part of the value added tax (VAT). The components of expenditure on final goods are calculated at purchaser prices, that is, including trade margins and taxes on the corresponding products. Production for own consumption is valued at market (basic) prices in the case of owner-occupied housing service, and is valued at cost, in the case of other products. Mexican accounts carry out adjustments to market prices when transfer prices are detected between a parent company and its subsidiaries, particularly in the automotive industry and the oil industry.

In accordance with the *2008 SNA* guidelines, total exports and imports are valued at free-on-board basis (f.o.b.). The conversion of transactions in foreign currency is carried out using the average exchange rate that reflects the market at the time such transactions are carried out.

2.4.2 Recording is Done on an Accrual Basis

Transactions are recorded on an accrual basis. Work-in-progress is recorded for construction, industrial goods that involve a long production process, and agriculture. Annual government revenue data include adjustments to cash and in-kind payments for returns and reclassifications to record revenue on an accrual basis. Cash transactions are also adjusted on an accrual basis for government expenditures. The Private Services Survey collects data on rental housing, primarily on an accrual basis. Private education services are consumed and paid for mainly on an accrual basis.

2.4.3 Grossing/netting Procedures are Broadly Consistent with Internationally Accepted Standards, Guidelines, or Good Practices

In accordance with the *2008 SNA* guidelines, transactions between establishments of the same enterprise are registered in gross figures.

3. Accuracy and Reliability

3.1 Source Data

3.1.1 Source Data are Collected from Comprehensive Data Collection Programs that Take Into Account Country-specific Conditions

INEGI has regular programs of basic statistics in economic matters, such as the Economic Censuses, with a five-year periodicity and National Economic Surveys, with monthly and annual periodicities, which cover most of the economic activities. In the most recent censuses, data is collected mainly through tablets (DCM) and over the internet, using preloaded programs that validate data entries to carefully control the information that is loaded into the database.

The Economic Censuses capture information at the establishment level, and cover common and specific topics, according to the different economic sectors. Questionnaires are designed to collect information on all economic units that carry out activities. The 2009, 2014, and 2019 Economic Censuses collected data at the economic unit level, preferably from establishments as mentioned before, although in some sectors, the data was collected from enterprises, construction companies, fishing or mining units.

The common topics for the 2019 Economic Censuses were: (1) Location of the establishment, (2) legal category, (3) type of organization, (4) start of operations and total days worked, (5) economic classification, (6) employed personnel, salaries, (7) expenditure for consumption of goods and services, fiscal, financial and donations expenditure, (8) income from the supply of goods and services, (9) information and communication technologies.

In addition to the common topics, each questionnaire included specific sections based on the economic activities of the sector. For example, for the Fishing Sector, information regarding the type of fishing and the location of the arrival point was collected; in Mining, mineral exploration and the production and sale of minerals was collected; in Manufacturing, the detail of the products made and sold to the national or foreign market and details of the raw materials consumed by type of market of origin was obtained.

The Economic Censuses collect data on the economic activity of households and establishments in areas with more than 2,500 inhabitants, in 4,563 localities, 32 states and 2,465 municipalities. For rural areas or areas with less than 2,500 inhabitants, a rural sample with geostatistical areas by federal state is designed to capture economic units in these communities.

The National Agricultural Surveys (ENA) 2012, 2014, 2017, and 2019 collect data on the production and characteristics of the agricultural, livestock and forest production units. Detailed information is collected for main crops, livestock species and forest species as well as for those agricultural products of interest to Federal Government programs. The coverage of the most recent survey (ENA 2019) included 29 products: 24 crops and 5 species or livestock products. In the case of short-cycle crops, the survey covers both agricultural cycles and all information, including production costs and capital costs. The results of the four surveys have been evaluated and used for both agricultural crop and animal species production. INEGI hopes to expand product coverage with the change of base year from 2013 to 2018.

Information on expenditures collected using the National Agricultural Surveys have some gaps due to the availability of accounting records from certain producers (mainly informal producers). Respondents understand concepts differently and this generates a wide variety of responses. Data collected via the National Agricultural Survey is reviewed at the time of the change in base year and used to produce benchmark estimates of national and state agricultural production.

The National Economic Surveys have various methods of gathering information related to the use of information and communication technologies. The priority method is internet-based collection, for which respondent codes and passwords are used to guarantee the authentication of the respondent and the confidentiality of the data. On average, of the total sample of the four sectors under study, 75 percent is collected using this modality. Collection through the Mobile Computing Device (DCM) allows the interviewer to gather information and register it on the device. In both cases (internet-based collection and DCM) a set of validations is implemented to ensure the quality of the information at the time of collection. Information security is guaranteed by data encryption.

Computer Assisted Telephone Interviews (CATI) are used as an agile means of gathering information, especially from business opinion surveys. Collection by email is carried out using a questionnaire in Excel that is later gathered by field staff. Lastly, traditional paper collection, in which basic validations are applied to the information at the time of the interview, is also used (although this is being increasingly replaced by other collection modalities).

Also, various strategies to tackle the health regulations related to the COVID-19 pandemic were implemented to ensure adequate collection levels for the production of statistical information. First, the collection through digital means (internet and email) continued to be prioritized to avoid face-to-face interviews. New operating condition codes were designed and applied to fully identify the economic units with problems caused by the health emergency (e.g., 07C Definitive closure due to contingency; 10C Temporary closure due to contingency and 22F Pending due to contingency). Likewise, an electronic format was implemented to collect additional information on the time worked, the level of employed personnel, and remunerations

Survey questionnaires are constructed according to sound design principles (e.g., questionnaires are subject to field/pilot testing; observation studies are conducted during the design of survey questionnaires). They are reviewed periodically to take account of changing circumstances, and proposed changes are pretested to ensure effectiveness. Survey instruments are designed for efficient data capturing/processing in such a way to minimize non-sampling errors.

The various components of the National Consumer Price Index (INPC) are important inputs into constant price estimates of GDP. The current INPC reference period is the second half of July 2018 = 100. The basket is made up of a sample of around 120 thousand specific products and services, grouped into 299 products. The INPC 2018 basket was built with information from the National Survey of Household Expenditures 2012 and 2013, using the 1999 COICOP classification.

The weighting structure defines the share of the expenditure of a good or service in the basket. To be considered in the basket, its weight must be equal to or greater than 0.01 percent. Most prices are collected from outlets that have been identified using probability sampling. Prices are collected from establishments located in 55 geographic areas of the 32 States. Around 328 thousand prices for 299 products are collected monthly. The collection of prices for food, beverages and tobacco are conducted weekly while the rest are fortnightly. Household rent prices are gathered semi-annually.

The Federal Tax Code establishes that the INPC is calculated using the Laspeyres formula. It is carried out in two stages. In the first stage, the elemental indices are calculated by generic and geographic area using a Jevons formula. In the second stage, the higher-level price indices are calculated with the Laspeyres formula. The calculation and disclosure of the INPC is done fortnightly and monthly. It is published around the 10th and 25th of each month in the Official Gazette and one day before on the INEGI website.

The National Producer Price Index (INPP) is a set of price indices whose purpose is to provide measurements of the price change of a fixed basket of goods and services representative of national production. The reference period of the current INPP is the month of July 2019 = 100. The basket of goods and services is made up of 560 generic products and services, of which 68 correspond to the Primary sector, 382 to the Secondary sector and 110 to the Tertiary sector.

The weighting structure is built using information from the Economic Censuses and the Mexican System of National Accounts. The products are ranked with respect to their share of national

production, selecting those with a share greater than or equal to 0.005 percent. The products are classified using the 2013 North American Industry Classification System.

The prices of the 560 products are obtained from three different sources of information: productive establishments (direct collection), the INPC or from administrative registers. In the INPP's direct collection economic units, there is a probabilistic sample design for 71 products and a cut-off sample for 376 products.

The INPP covers the agricultural, manufacturing, construction and services sectors, which account for 79.2 percent of national production. The indexes are compiled in two stages: first elementary indices per product are calculated using the Jevons formula, in the second stage the elementary indices are aggregated using the Laspeyres formula. The INPP is calculated and published monthly.

Price statistics are available at sufficient detail and are consistent with the variables being deflated in the national accounts in terms of price concept, coverage, and reference period.

Article 23 of the Law of the National System of Statistical and Geographic Information states that "the Subsystem of Economic Information will have an information infrastructure containing at least a geostatistical framework and a National Directory of Economic Units." INEGI has established the Mexican Business Statistical Registry (RENEM), which contains current and historical information on the economic units, establishments and enterprises that carry out their economic activities.

The RENEM contains information related to the location of the establishment, as well as some economic variables, such as: type of economic activity, year in which activities began, employed personnel and income; in addition, the enterprise it belongs to, in the case of multi-establishment enterprises is also identified. RENEM is fully updated every five years with the results from the Economic Censuses, and continuously but partially, with updates obtained from the respondents to the National Economic and Price Surveys. Another source of update comes from responses to the *Consultation System of the National Directory of Economic Units (DENUE)*. Each year information from newly created companies is verified in the field. The monthly and annual economic survey sampling frames are obtained from the RENEM. Samples are designed to collect information at the six-digit level of the NAICS.

INEGI has been able to link the RENEM to registers maintained by the Mexican Institute of Social Security, the Tax Administration Service, and the Federal Electricity Commission among others. This permits INEGI to establish links between the RENEM identifier (CLEE, Business Statistical Key) and the identifiers of the different administrative registers, facilitating the use of administrative data in the production of INEGI statistics. Examples of products utilizing record linkage approaches include: the Monthly Indicator of Manufacturing Activity, the Profile of Export Manufacturing Companies, Quarterly Exports and the Value Added of Global Manufacturing Export.

The 2014 Economic Census compiled detailed information at the 2013 NAICS six-digit level. The relevant information for the compilation of National Accounts included data on production and sales by product (finished goods) in quantities and values, and data on the main inputs consumed,

also in quantities and values, compensation of employees, capital formation and capital stock by type of goods, and stocks of inventories at the beginning and end of the period. The 2014 Economic Censuses was used as a basis for the preparation of supply and use tables for the 2013 base year.

Annual surveys collect information on the value of production and sales at aggregate levels. Estimates of intermediate consumption disaggregated by commodities is not available in from the annual surveys. The annual surveys also collect information on the change of inventories. The Monthly Survey of the Manufacturing Industry is the only survey that has product details.

Other data from the annual National Economic Surveys are similar in coverage and detail to those from the Economic Censuses. Most of the annual data are presented by domain and at the NAICS activity class level. The annual surveys cover manufacturing, retail and wholesale, private nonfinancial services, transportation, and construction. For the latter, only the formal sector is covered and is complemented with data from the National Survey of Occupation and Employment to measure the informal sector. The annual manufacturing surveys collect data on inventories that, together with mining, trade, agriculture, crude oil and their products, have been used in the compilation of inventories changes for the National Accounts.

The monthly surveys are representative at the NAICS level of industry, group of industries, subsector, or sector, according to the statistical design of the survey in question. Since these surveys do not cover some activities, information is complemented with further research. Monthly surveys are available for manufacturing, mining, retail and wholesale, private non-financial services, and construction companies. The monthly manufacturing surveys provide information on production and sales by product, in volumes and values, as well as data on wages and employed personnel, and hours worked by categories of personnel. Monthly surveys of non-financial services are used for the estimates of services output. In the manufacturing surveys, the population under study are the establishments belonging to the 239 classes of activity in the NAICS manufacturing sector (31-33), including the economic units that participate in the IMMEX program, of which 223 are study domains and 16 are not study domains. A total of 235 classes of activity are considered under a non-probabilistic sampling scheme and four classes use a probabilistic and stratified scheme.

The surveys of construction companies have a coverage that allows obtaining national estimates by 2013 NAICS subsector of economic activity and by state. The sampling scheme is probabilistic and stratified, with independent selection for each stratum by domain of study. The retail and wholesale trade surveys are targeted to establishments oriented to the purchase, sale or purchase-sale of goods that are distributed in the same state in which they were acquired (except for preparation activities such as: measurement, packaging, transport, wrapping, assembly, cleaning, etc.). Both non-probabilistic and the probabilistic and stratified designs are used when compiling estimates.

The services surveys target those economic units that provide services to third parties, whether commercial, professional, social or cultural. Excluding services related to agricultural, forestry and mining activities; financial and insurance services; the activities of the public sector and government, international and extraterritorial organizations, both non-probabilistic and the probabilistic and stratified design are used when compiling estimates.

In the case of non-response, the weights are adjusted in the surveys with probabilistic designs; while in surveys with non-probabilistic designs, non-response is imputed using the trend domain level derived from the reporting units.

Between 70 and 80 percent of the data in the annual and monthly surveys is collected over the Internet and the rest through email and visits to establishments. Due to restrictions associated with the COVID-19 pandemic, the collection of the National Economic Surveys during 2020 and 2021 are conducted over the internet or through computer-assisted telephone collection.

INEGI has an established program of household surveys. The ENOE is conducted monthly, the ENIGH is carried out every two years and the National Demographic Dynamics Survey (ENADID) and the National Household Expenditure Survey (ENGASTO) are conducted periodically.

The ENIGH covers all geographic areas and the entire population, both urban and rural. The survey is based on a multi-stage random sample design. The ENIGH provides estimates of household spending with a breakdown of 700 groups of goods and services. Its results have not been widely used in the National Accounts, partly because these surveys collect information related to a three-month period (e.g., from August 21 to November 28, of the reference year) rather than for a full calendar year. INEGI is considering a project next year to adjust and incorporate the survey results into the National Accounts, and to conduct the ENIGH during a complete calendar year.

Households tend to underreport incomes and expenditures when responding to household budget surveys. INEGI staff regularly adjust reported income to address this bias. This improves the overall quality of the estimate of informal activity and helps reduce the statistical discrepancy between net lending/borrowing in the household capital account and that of the household financial account.

INEGI makes extensive use of administrative data for the national accounts. Examples include administrative records on the export manufacturing industry, mining, urban passenger transportation, vehicle fleet, slaughter of cattle on municipal slaughterhouses, and the public finances. INEGI receives nearly complete annual data on the government finances, including budget execution and non-budgetary expenditures from the federal government and the social security system. Data on federal government income and expenditures, including non-budgetary items, are obtained in detail from SHCP. INEGI collects and compiles the State and Municipal Public Finance Statistics based on information obtained directly from the Finance Ministries of each state and the Government of Mexico City. Quarterly data are only available for the Federal Government.

In line with recommendation 21 of the 2015 ROSC INEGI has improved the timeliness of the data on the state and municipal government from 360 days to 270 days following the reference period. A strategy has been implemented for collecting data from 32 states and the 320 most economically important municipalities in a timely fashion. These data provide sufficient coverage to allow the production of annual Institutional Sector Accounts. As a complement to this strategy, INEGI has generated precision and reliability indicators which the national account compilers can use to monitor non-response and coverage.

The quarterly data available are considered adequate for the elaboration of reliable estimates of GDP by industrial activity. Monthly surveys are conducted for manufacturing, construction, commerce, and private non-financial services. Monthly information for agriculture, forestry and fishing, as well as mining, is obtained from administrative records. Financial statements are received from the BM for the financial corporations sector. For services not covered by the surveys, special research projects are conducted periodically.

The estimates of quarterly GDP by expenditure are compiled using information from the National Economic Surveys, Foreign Trade and Balance of Payments Statistics, National Price Indices and administrative records. Household consumption and gross fixed capital formation are estimated using the commodity flow approach. Inventory stocks and change are estimated using information from the annual survey of manufacturing and wholesale and retail trade.

3.1.2 Source Data Reasonably Approximate the Definitions, Scope, Sectorization, Classifications, Valuation, and Time of Recording Required

The source data reasonably approximates the concepts, definitions and scope of the data required to compile National Accounts. The high level of disaggregation in the source data allows corrections in the classifications. Valuation adjustments are made to the manufacturing survey data, as production values are reported at producer prices and not at basic prices. Pilot tests have been conducted to ensure that collected data allows the compilation of estimates in accordance with international guidelines. The coverage of total economic activities (in terms of value added) by all data sources is acceptable. In general, the coverage of activities within the most important industrial groups is also good (85 to 95 percent).

Economic Activity	Coverage	Non-Response
Agriculture	92.0	8.0
Oil	100.0	0.0
Mining	98.0	2.0
Manufacturing	88.8	11.2
Refinery and Petrochemical	100.0	0.0
Electricity and Water	100.0	0.0
Construction	87.8	12.2
Domestic Trade	90.9	9.1
Financial services	100.0	0.0
Non Financial Services	89.8	10.2
Government services	90.0	10.0

F.O.B adjustment to CIF based import values are estimated using information from customs. INEGI staff estimate freight and insurance by tariff item by identifying various factors that influence their amount, such as the weight of the merchandise and the distance traveled.

3.1.3 Source Data are Timely

Source data required to compile the monthly, quarterly and annual National Accounts estimates are received in a timely manner. Source data providers adhere to a delivery calendar established by the national accounts program. Respondents are made aware of the deadlines for reporting. In the case of data provided by other INEGI units, it follows a strict delivery schedule that reflects the production cycle for the National Accounts. The National Consumer and Producer Price Indices are received on time, as are the Agricultural Price Indices provided by SADER, the detailed statistics of foreign trade, monetary, and the balance of payments prepared by the BM.

3.2 Assessment of Source Data

3.2.1 Source Data—Including Censuses, Sample Surveys, and Administrative Records—are Routinely Assessed, e.g., for Coverage, Sample Error, Response Error, and Nonsampling Error; the Results of the Assessments are Monitored and Made Available to Guide Statistical Processes

Survey sampling errors and imputations are tracked, outliers are identified and clarified and/or corrected with respondents. Surveys and censuses are audited to verify the accuracy of individual survey data. Survey data is typically compared to other sources when available. There are around 300 validation criteria applied by INEGI staff to evaluate the quality of the source data. Some are applied in the field at the time of the interview, others are applied when the questionnaire is being completed, and others are applied when the responses are processed. Confidence intervals, coefficients of variation and standard errors are calculated for probabilistic surveys.

Administrative records are reviewed for consistency and accuracy with other secondary sources. A process to verify the consistency of international trade between foreign trade statistics, balance of payments, and customs records is undertaken before they are included in the SNA.

3.3 Statistical Techniques

3.3.1 Data Compilation Employs Sound Statistical Techniques to Deal with Data Sources

Source data and estimates are verified for internal consistency. All estimates are carefully reviewed prior to publication. Survey and census results are audited to verify the validity of the data, and survey results are compared with other data sources when possible.

Compilation procedures are established to minimize processing errors such as coding, editing, and tabulation errors. When necessary, adjustments are made to the source data to address differences with the National Accounts definitions, missing observations, incomplete coverage, or differences in classifications. To improve coverage in the case of deterministic (non-random) surveys, special studies are carried out on activities for which there are no surveys

The imputation methods used for National Economic Surveys are standardized. The imputations of missing observations or incomplete coverage are generally carried out by nearest neighbor imputation or projecting the recent trend forward by applying the growth rate of a broad aggregate.

Adjustments to unit records are made only when clearly warranted (e.g., outliers are verified with respondents and are not replaced or modified unless clearly required). Grossing-up factors are derived scientifically, based on sample design. In the case of new / emerging activities or activities for which there are no surveys or administrative records special studies are carried out.

3.3.2 Other Statistical Procedures (for example, data adjustments and transformations and statistical analysis) Employ Robust Statistical Techniques

Informal sector activities are measured and included using data from the Economic Censuses. SCNM estimates do not include illegal activities such as the manufacture and distribution of narcotic drugs and psychotropic substances and the trade and transport of smuggling goods, due to the inherent difficulty of estimating such activities without consistent and reliable data. Estimates of informal activities originate with information from the 2014 Economic Census (CE2014) and the National Survey of Occupation and Employment (ENOE). Methods consider the recommendations regarding the Informal Sector established in the manual on the measurement of informality (ILO). INEGI has developed an employment matrix to estimate information activity. The employment matrix considers jobs by type of economic unit and occupation and assists with estimating the production and income of the Informal Sector.

Of the 57 recommendations of the *2008 SNA*, only two could not be implemented, the treatment of multiterritorial companies (25c) and the measurement of illegal activities (33). INEGI has not implemented the SNA recommended treatment of multiterritorial companies (33) due to the complexity in assigning the unit to the predominant territory. Currently, INEGI does not have access to the data to implement this recommendation and will need to continue to collaborate and exchange information with national and international stakeholders to address this data gap.

INEGI has made significant progress in developing estimates of the value added of Global Manufactured Exporters (VAEMG). This permits an analysis of the value added of products produced in Mexico by country. An important part of this work involves estimating the value of manufacturing services on physical inputs owned by others (goods received from abroad for processing-Maquila). To identify foreign trade and production involving goods received from abroad for processing, INEGI assumes that cases in which exports are manufactured using almost exclusively imported inputs represent cases of goods for processing. This criterion is used because direct measurement of changes in the economic ownership of imported goods is not feasible. The production associated with goods received from abroad for processing is treated as part of the Value Exports of Global Manufactured Exports (VAEMG), and net exports of these goods are treated as exports of services and inputs of domestic goods used in processing.

INEGI does not record illegal activities (25c) in the SCMN due to source data limitations. INEGI is investigating the possibility of developing experimental estimates to determine the materiality of illegal services in Mexico (possibly as a Satellite Account).

Production Approach Procedures

Production estimates are compiled separately for approximately 800 activities at the six-digit level of the 2013 NAICS classification. These are grouped into 20 sectors, 80 subsectors and 265 groups of economic activity, which summarize the total economic activities of Mexico. The correspondence with ISIC Rev.4.0 is two digits, with some minor exceptions.

Except where direct measurements of production values are available, production at current prices is calculated by multiplying quantities by average prices. Constant price measures are calculated using the average price during the base year and the quantities produced during each period.

Extremely detailed supply and use tables and input-output matrices were compiled and balanced with more than 800 industries and outputs for the base year 2013. In the supply and use tables, the uses of imported intermediate inputs are registered separately from the uses of inputs produced in the country.

Procedures for annual estimates

In the preliminary version of the annual accounts the volume of production for years other than the base year is calculated by multiplying the output of the base year, at a detailed level, by a corresponding quantity indices. Intermediate consumption at constant prices is calculated assuming fixed technology coefficients (Leontief), so that detailed intermediate inputs at constant prices are a fixed proportion of the volume of output. Intermediate inputs at constant price are multiplied by Price Indices to derive measures at current prices of intermediate inputs. In certain cases, the price indices reflect unit value indices constructed from data on the value and physical quantities of detailed types of industrial products. Unit value indices can be affected by changes in the mix of qualities included in unit values and are used when a producer price index is not available. Intermediate consumption at current prices is also sometimes obtained by extrapolation with value indices reported in economic surveys.

In the case of services, the double deflation method is used: gross production and intermediate inputs at current prices are each deflated by the Laspeyres Price Indices constructed at the level of group of industries or industry or based on physical volume indices of relevant indicators. For the government, the volume of production is obtained by deflating the values of expenditures using input price indices; Value added at constant prices is calculated by multiplying the base year compensation of government employees by a government employee index adjusted by the number of annual working days.

The revised version of the annual National Accounts is published seven months after the preliminary version. Data from the annual survey on intermediate inputs are used to estimate these inputs in the

revised annual accounts. Full data on state government spending, rather than a sample, is also incorporated at this time.

Intermediate consumption data is compiled with the same level of detail as output, that is, full production accounts are prepared at the 6-digit NAICS level. Intermediate consumption in the base year is estimated from the quantities and prices of inputs consumed in the production process as obtained from the censuses.

Procedures for quarterly estimates

In the quarterly accounts, a single indicator approach is used to estimate intermediate consumption because data on the uses of individual intermediate inputs are not available. For goods producers, fixed proportions are assumed between the quantities of inputs and the quantities of output, and the constant price measures are inflated with the appropriate Price Indices. Aggregation is undertaken by using the weighting structure from the 2013 base year.

Techniques used to address specific issues in calculating GDP

Estimates of gross operating surplus in the oil and mining industries reflect Mexico's legal environment. In particular, the government owns the subsoil assets, so tax payments to the government for the right to extract minerals and oil and natural gas are recorded as rents paid to the owner rather than taxes.

Estimates of imputed rents for owner-occupied housing are based on market rental prices for similar homes. The base year estimate for the housing stock was obtained from the Population and Housing Count of 2005 and the Population and Housing Census of 2010 as well as the Intercensal Survey of 2015 and taking into account estimates of capital formation in housing based on surveys of the construction industry. The base year rent estimates were obtained from a detailed study using hedonic prices by type of home, because the landlord evaluations were considered to be biased. The model also includes neighborhood quality indicators and a measure of location at the census tract level. Estimates of secondary and vacation residences were included. Estimates for the current period are made by extrapolating those for the base year with the housing stock index and the rental indices. New baseline information on the 2012 housing stock is being prepared.

The accounts of the financial corporations sector are compiled from the administrative records of financial intermediation and insurance institutions. Financial Accounts and Balance Sheets are prepared using quarterly information from the BM and financial regulators, such as the Insurance and Surety National Commission (CNSF), the National Commission of the Retirement Savings System (CONSAR), and Financial Information of the Mexican Stock Exchange issuers. These records are used directly, with others used to achieve sectoral reconciliation.

In the case of the general government, information is gathered from the SCHP and the BM. In the case of subnational governments, the calculations are made from a sample of State and Local Governments (due to insufficient information), which is grossed-up to obtain the national level.

In the case of Households, INEGI works with counterparty data of the other sectors due to the low representativeness of the ENIGH and its biennial availability.

Balance sheet stocks are reconciled with the sum of the quarterly flows of the Financial Account, the Other changes in volume and the Revaluation account (i.e., Closing Stock - Opening Stock = Financial Account + Other volume changes + Revaluations).

Financial intermediation services indirectly measured (FISIM) are calculated separately for loans and deposits using the benchmark rate method. The reference rate is based on an interbank interest rate. In the annual accounts, FISIM flows are measured by multiplying the interest rate differentials against the reference rate by the average stocks of loans or deposits based on the final stocks of the last five quarters. The interbank benchmark rate has worked well in practice.

Mexico has several development banks for the public policy objective of promoting the development of selected productive sectors. Development banks therefore facilitate banking for economic agents that do not have the guarantees required by first-tier banks. Likewise, development banks participate as guarantors of the economic agents or institutional sector. Development banks offer financial products at competitive cost relative to commercial banks, and therefore generate revenue to cover financial and operating expenses. The calculation of FISIM for development banks is positive, as they do not offer below-cost products to borrowers.

Output from non-life insurance services is calculated as premiums plus adjusted premium supplements minus a measure of adjusted claims based on provisions for future claims taken by non-life insurance companies. These provisions may not be a good measure of expected claims; a more robust procedure would be to model expected loss rates based on historical claim patterns.

The National Accounts records the work-in-progress for the construction and manufacture of important durable equipment that has a long production process. The Quarterly National Accounts also record work-in-progress agricultural production for both perennial crops and short-cycle crops.

Capital stocks are estimated using the perpetual inventory method with straight-line depreciation schedules. It should be noted that geometric depreciation is a more common international practice because it produces consistent estimates of capital services for multifactor productivity measurement purposes. Estimates of consumption of fixed capital are prepared along with estimates of the capital stock. Estimates of consumption of fixed capital cover the entire economy except for a part of general government.

General government consumption of fixed capital is only estimated for the social security funds and decentralized and deconcentrated agencies of the central government. As a result, general government final consumption expenditures are underestimated. INEGI has embarked on a project to improve these estimates. This work includes:

- Consulting various information sources for a more detailed asset breakdown by type of asset.

- Reviewing the useful life estimation parameters indicated in the "Estimated useful life guide and depreciation percentages," for machinery and equipment assets, issued by the Accounting Harmonization Council (CONAC).
- Studying the different methods of estimating the consumption of fixed capital of the Government, retirement function (Winfrey function), and depreciation profile (geometric age-price profile) to obtain gross and net stocks.

Recording is done on an accrual basis, however, there are some exceptions, especially in the general government sector. Improved methods have been introduced in the quarterly accounts for the real estate, rental and leasing industry to measure production in a way that reflects accruals rather than cash. Residential rents are deflated by a rents index (National Consumer Price Index (INPC)) and the National Producer Price Index (INPP) is used for commercial rents. Production is now estimated with a rental housing volume indicator. If the houses are occupied, a service is estimated.

Annual revenue and expenditure of state governments and municipalities are recorded on an accrual basis. In some cases, the annual cash data are converted to accrual by allocating them to the period to which they relate. Quarterly government finance data is recorded on a cash basis.

Procedures for Compiling GDP Volume Measures

GDP estimates at constant prices are estimated using fixed 2013 weights. The base year weights are updated every five years. Production estimates at constant prices are generally obtained by extrapolating the base year production value, using a 2013=100 Laspeyres-type volume index. These indices are constructed from detailed monthly production data derived from National Economic Surveys and average prices of products in the base year. The estimates of the production volume indices are calculated using information provided by the Monthly Industrial Survey with an extensive list of differentiated products for 231 industries.

Government production is calculated as the sum of production costs at constant prices, where employee compensation is calculated by extrapolation with an employment index, and intermediate purchases are deflated by the corresponding Price Indices. The calculation of taxes and subsidies for products in their constant valuation is obtained by extrapolating the values of the base 2013 with volume indices of the economic activity. It is carried out by type of tax (special tax on products and services, VAT, other taxes) and subsidies; and by economic variable (Private Consumption, Gross Formation of Fixed Capital and Intermediate Demand) and type of SCIAN activity. The volume indices used to extrapolate are calculated with the values at basic prices of the respective variables.

Trade margins at constant prices are calculated using an appropriate procedure, applying the corresponding margin rates of the base year to the transaction volumes channeled through retailers.

Expenditures Approach Procedures

Household consumption and gross fixed capital formation are estimated using the commodity flow approach at the most detailed level possible.

Household consumption expenditure is classified according to COICOP, as well as by durability (durable, semi-durable, and nondurable goods).

Government final consumption expenditure is calculated as government production minus incidental production of market goods and services. Government final consumption expenditure is classified according to COFOG.

Gross fixed capital formation is compiled by group of industries of origin, type of good and institutional sector. Estimates of gross fixed capital formation include intangible capital assets from research and development, mineral exploration, software and databases, artistic and entertainment originals, and intellectual property products. In the case of the oil industry, exploratory wells are included in investment in mineral exploration.

Changes in inventories for manufacturing, changes in assets by type, royalties, and lease payments are measured based on data from annual manufacturing surveys. Administrative data on physical progress in public works (Physical and Financial Advancement of Public Works) is used to measure construction by type and work-in-progress in government construction projects. The annual manufacturing surveys collect data on inventories that, together with data on mining, trade, agriculture, crude oil and their products have been used in the compilation of changes in inventories of raw materials, finished goods, inputs of the commercial activity, and goods for resale.

Estimates of household consumption at constant prices are obtained by extrapolation using detailed volume indices of production or sales (shipments) for the domestic component and deflating the imported component of expenditure by unit value-based import indices.

Exports of goods and services at constant prices are obtained by deflating current values with appropriate Production Price Indices and other Price Indices for international or North American markets. To deflate imports, unit value import price indices or indices of the international or North American market are used. Imports of goods are deflated with appropriate price indices for each type of activity.

Specific Techniques for Quarterly Compilation

Quarterly GDP estimates are produced at a detailed level (743 industries). The level for publication is significantly higher – aggregated to 17 industries. Output is estimated by extrapolating base year production using value indices derived from monthly, quarterly and annual surveys. In cases where value indices are not available, volume indices are used for the extrapolation with representative prices indices used to derive current price estimates.

Quarterly intermediate consumption at current prices is estimated using the input-output relationships from the annual estimates of the previous year. When this information is not available for a given industry information from similar industries is used.

To align quarterly series with annual totals, the Denton benchmarking technique is used. The Denton technique is applied to production and intermediate consumption at the level of economic activity. Value added is calculated as output less intermediate consumption.

To avoid a step problem in the first quarter, the average benchmark to indicator ratio (BI) of the previous year is used in all the short-term products of the SCNM. When benchmarking, the National Accounts compilers need to consider the following constraints:

- The original national and regional short-term calculations are prepared on a monthly basis, the value of the quarter is obtained by adding the values of the three months. With this, better coverage is available.
- The timely quarterly GDP estimates include 743 classes of economic activity.
- A single Benchmarking procedure, the Bench-Mexico Program was developed.
- The program solves the differences between the monthly indicators vs. quarterly accounts vs. annual calculations.
- Results by state vs. national results.
- A dimension is added with the Quarterly Institutional Sectors.
- The use of an annual BI allows preserving as far as possible the changes of the original values in the first period of the following year.

Seasonal adjustment of quarterly GDP is performed using the US Census Bureau's X-13ARIMA-SEATS (Autoregressive Integrated Moving Average Model) software. The adjusted series takes calendar and holiday effects into account. The monthly time series for 16 activities in the Global Indicator of Economic Activity (IGAE) are also seasonally adjusted using X-13ARIMA-SEATS. Each time series is adjusted for seasonality independently. As a result, seasonally adjusted series may differ between months and quarters, as well as in cross-section between the sum of the components of an aggregate and the direct measure of the seasonally adjusted aggregate.

An inter-institutional working group on seasonal adjustment (BM, SHCP, Ministry of Economy, and INEGI) has been established to improve communication with users of the National Accounts on this issue and other seasonal adjustment issues. The objective of the Group is to analyze and explore the best techniques and procedures, as well as the use of new tools for the seasonal adjustment of the economic series, strengthening the Consensus Methodology among the institutions. In addition, the methodology used is published, in such a way that it can be replicated by any stakeholder.

3.4 Assessment and Validation of Intermediate Data and Statistical Outputs

3.4.1 Intermediate Results are Validated Against Other Information Where Applicable

The source data used for the national accounts are compared with alternative data, when possible. For example, agricultural prices supplied by SADER are compared with INPP prices compiled by INEGI and foreign trade records. To check consistency with related data sources, comparisons are made with alternative information sources that show correlation with the observed variables in levels or trends. For the manufacturing industry, information from surveys is compared with the data

provided by the chambers of producers, producer associations, and foreign trade statistics. Some examples of external data sources used for validation are reports from the Tequila Regulatory Council, the Chamber of the Cement Industry, the Chamber of the Iron and Steel Industry, the National Association of Self-service and Department Stores, the Association of the Automotive Industry (AMIA) and the National Association of Producers of Buses, Trucks and Tractors (ANPACT).

Financial information from public entities and companies is compared with the Federation's Public Treasury Account. Survey results are validated by examining current results with historical input-output relationships and historical shares. Comparative analyses of volume growth and implicit prices, with similar activities in the national production index are also conducted.

3.4.2 Statistical Discrepancies in Intermediate Data are Assessed and Investigated

Whenever necessary, research is carried out on discrepancies affecting the variables and steps are taken to eliminate them. The surveys use a systematized validation model that allows detecting statistical discrepancies or inconsistencies. In the case of administrative records and accounts, data providers may be asked to clarify the interpretation of the figures and the necessary transformations to obtain appropriate concepts for the National Accounts.

3.4.3 Statistical Discrepancies and Other Potential Indicators of Problems in Statistical Outputs are Investigated

The supply and use framework is used to identify potential inconsistencies in source data. Detailed supply and use tables (with 783 industries in the base year) can be used to distinguish whether discrepancies can be traced back to the original source data or stem from adjustments to this data. Since 2013, the estimates of changes in inventories have been calculated directly by activity, which allows presenting a statistical discrepancy between the estimates of GDP by economic activity using the production approach and the estimates of GDP by expenditure approach. The sources of any large discrepancies are researched, and estimates are compared with data from other countries and with estimates from the private sector, if available.

3.5 Revision Studies

3.5.1 Studies and Analyses of Revisions and/or Updates are Carried out Routinely and Used Internally to Inform Statistical Processes (see also 4.3.3)

The Office of National Accounts monitors differences in trend and magnitude between preliminary and final data that have been caused by new or revised source data. Revision studies identify the sources of any discrepancies and appropriate adjustment mechanisms are used.

While the studies are not published, the sources of the most significant differences are disclosed in accordance with the data revision policy, noting the reason for the revision (i.e., corrections of the information sources, updating of estimates, changes in the status of information). In addition, technical notes accompany the press releases when substantial revisions are made. INEGI also holds meetings with various stakeholders ((private, public, academic, and financial etc.,) when significant

revisions are made (such as the introduction of an updated base year). Major revision studies are conducted when a new base year is introduced.

4. Serviceability

4.1 Periodicity and Timeliness

4.1.1 Periodicity Follows Dissemination Standards

GDP estimates are compiled quarterly and annually and comply with the requirements of the Special Data Dissemination Standards (SDDS) in terms of coverage, periodicity, timeliness, and dissemination of advance release calendars. The release dates of macroeconomic indicators are identified in INEGI's *Calendar for the Dissemination of Statistical and Geographic Information of National Interest*.

4.1.2 Timeliness Follows Dissemination Standards

By subscribing to the SDDS, Mexico complies with, and in fact exceeds, the periodicity and timeliness requirements for quarterly accounts. Quarterly estimates of GDP by economic activity at constant prices and current prices are published 52 days after the end of the reference period. Preliminary estimates of the annual goods and services accounts are published within nine months of the end of the reference year and preliminary estimates of the institutional sector accounts are published within 11 months of the end of the reference year. Revised versions of these accounts are published 16 and 18 months after the end of the year, respectively. Full supply and use tables were published for 2013, and similar tables were published in 2017 for 2012.

4.2 Annual Institutional Sector Accounts (derived from the Quarterly Institutional Sectors Accounts) are Available 155 Days Following the End of the Reference Year Consistency

4.2.1 Statistics are Consistent Within the Dataset

GDP estimates are derived from the balances in the supply and use tables and therefore the various estimates of GDP (production, expenditure, income approaches) are consistent. The quarterly GDP estimates are mainly consistent with the annual estimates, as both use the same concepts, definitions and classifications. Source data and compilation methods are also similar, except for agricultural activity. Agricultural work-in-progress is estimated quarterly and annually.

Quarterly data are adjusted to annual values so that the sum of the quarters matches the annual figure. Any discrepancy between the annual rates of change in GDP and the corresponding rate of change in the four-quarter totals is insignificant (no more than one-tenth of a percentage point).

Although the original (not seasonally adjusted) series are all consistent, seasonal adjustment is performed in a way that ensures consistency among all seasonally adjusted series, but it is applied

independently by series. As a result, small inconsistencies may be introduced in the seasonally adjusted versions of GDP and its components.

In the integrated accounts, a discrepancy between alternative measures of net lending can be expected due to the use of different data sources in the current and capital accounts and in the financial accounts. Discrepancies in alternative estimates of net lending in the integrated accounts have been reduced due to better classification and sectoral measurement of assets by the BM.

4.2.2 Statistics are Consistent or Reconcilable Over a Reasonable Period of Time

The National Accounts series are consistent over long periods. The current series, with base year 2013, includes estimates from 1993 to the most recent period (2019 in the case of the annual series). When the base year is changed, historical revisions are made to the series to keep it consistent over extended periods: for example, in the recent change of base year, the quarterly series was recalculated backward to 1993; for the base year 2003, the series was extrapolated backward to 1993; and for the base year 1980, the series was recalculated backward to 1960. Historical revisions of the series are also made when new data are available from the Economic and Population Censuses, revisions are made to source data or to other statistical systems that provide information for the National Accounts. The revisions and their justification are explained in the publications.

4.2.3 Statistics are Consistent or Reconcilable with Those Obtained Through Other Data Sources and/or Statistical Frameworks

National Accounts statistics are reconcilable with balance of payments statistics, and the net lending/net borrowing figure from National Accounts is generally consistent with the BOP current account balance plus capital transfers. Differences are mainly related to timing and revision policies. Differences are more substantial when comparing the BOP financial accounts and the National Accounts' financial account for the rest of the world. There are also discrepancies between the data on general government saving and investment in the National Accounts and those in the Government Finance Statistics. These discrepancies are due to differences in the classification of public sector entities as well as slight differences in the recording of transactions.

To facilitate the consistency of data between the BOP/IIP and the Institutional Sector Accounts (ISA), the BM and INEGI developed a mechanism to share information to assist INEGI with the development of the ISA. Information is shared on a quarterly basis and controlled access is granted to INEGI's personnel in charge of generating financial accounts and flow of funds tables.

4.3 Revision Policy and Practice

4.3.1 Revisions and/or Updates Follow a Regular and Transparent Schedule

Mexico follows a stable cycle for producing and revising the National Accounts and communicates this cycle to the public. Six months in advance, a release schedule for the following year is prepared and publicized through the media and on INEGI's website. When annual estimates based on data are released at the end of the year following the reference period, the estimates for the two years

are generally revised, as are the quarterly estimates for those years and for the current period. Quarterly estimates for the current year are also revised when data for a new quarter are published. When a new base year is introduced, INEGI prepares a publication outlining the substantive revisions as well as the improvements in the estimates. Revision notes and articles are also produced for any extraordinary revisions occurring outside of the regular revision cycle. The SCNM now has an established cycle of major revisions every five years, which meets international standards.

4.3.2 Preliminary and/or Revised Data are Clearly Identified

INEGI national accounts publications explain that the data for the latest two years are preliminary and subject to revision. The preliminary nature of the figures is indicated in the tables, on the covers of the publications and in INEGI's publicly available Economic Information Database.

4.3.3 Studies and Analyses of Revisions are Made Public (see also 3.5.1)

Revision studies are conducted when a new base year is introduced into the National Accounts. These studies highlight the differences between the updated series and the previously published series. These studies are published and made available on the INEGI website. Regular quarterly and annual revisions are investigated on an ongoing basis, but the results are not made public.

5. Accessibility

5.1 Data Accessibility

5.1.1 Statistics are Presented in a way that Facilitates Proper Interpretation and Meaningful Comparisons (layout and clarity of text, tables, and charts)

Annual National Accounts statistics are published in tables available and downloadable from the INEGI website. These tables contain absolute values, indices, contributions to change, and percentage change measures. Data can also be accessed via an Application Programming Interface (API) and a downloadable PDF version of the entire publication. The short-term statistics offer graphs and seasonally adjusted or trend-cycle series to facilitate analysis.

INEGI strives to provide users with a long and consistent time-series. The degree of detail of the specific series depends on the type of product offered and its periodicity. Although very detailed annual estimates are compiled and published for activities, for outputs and expenditures the level of detail published is not sufficient for certain types of analyses. However, additional details are available upon request and are provided if their disclosure does not compromise confidentiality.

Each release of the SCNM includes a press release describing the main results for the period under study. The periodicity and level of detail of SCNM releases vary, with statistical products produced and published at monthly, quarterly and annual frequencies, including national and regional geographic breakdowns. Mexico also produces a number of thematic satellite accounts providing enhanced detail for users.

GDP and Total Supply and Demand are published quarterly. Industrial Activity, Gross Fixed Capital Formation (for the national total), Manufacturing Production and Energy Generation and Supply for states and by economic activity are published monthly. Annual products include: Goods and Services Accounts; Institutional Sectors Accounts; Gross Domestic Product by Federal State; Public Sector Macroeconomic Indicators; Current and Accumulation Accounts; Production Accounts by Purpose for State Governments; Economic and Ecological Accounts of Mexico; and Satellite Accounts on Health, Tourism, Unpaid Work of Households, Culture, Housing and Non-Profit Institutions.

The following National Accounts series are published on a seasonally adjusted basis: quarterly gross domestic product, industrial activity, global indicator of economic activity, quarterly components of supply and demand and gross fixed capital formation (as a monthly index); and manufacturing production and electricity generation and distribution by state and by economic activity, as well as quarterly indicators of tourism activity.

A catalogue of INEGI's SCNM statistical products can be found at: https://www.inegi.org.mx/datos/?t=0190 listing titles, series, variables, content and year of publication.

5.1.2 Dissemination Media and Format are Adequate

Statistics are published simultaneously through a press release and on INEGI's website, in full-text PDF format. Statistics can also be easily downloaded from the website as Excel spreadsheets or in other formats, and key current statistics are displayed in both tables and graphs.

INEGI has made significant improvements to its website and overall dissemination framework, resulting in an improvement in accessibility. The publications with annual series for base years 1970, 1980 and 1993 are offered in digitized formats from INEGI's website, while for base years 2003 and 2008 their digital versions are already available in Excel. The 2013 base version is currently available and is disseminated in PDF format, accompanied by the Excel version for statistical tables, and methodological texts in Word to facilitate users' consultation of data located on the website, and in the Economic Information Bank (BIE). INEGI also provides users with customized tabulations in a variety of formats.

5.1.3 Statistics are Released on a Preannounced Schedule

A six-month advance release "Calendar of dissemination of statistical and geographic information and of National Interest" is published on INEGI's website. The calendar is updated every six months and is also disseminated in the form of a newsletter. The dissemination dates of all series of information of national interest are in the calendar.

All annual statistical products of the SCNM intended for periodic publication are recorded in INEGI's publication program. In addition, there is a section on INEGI's website known as the "Press Room" where the calendar of releases is located, as well as the press releases and information notes that INEGI provides to the entire user community.

5.1.4 Statistics are Made Available to All Users at the Same Time

Data are released at the same time to all users, on the date established in INEGI's calendar for the dissemination of statistical and geographic information and of National Interest, at 6:00 AM. On the day of publication, a note is sent at the time of release to the Office of the President of Mexico. The annual periodical publications are also released simultaneously to all interested users, on the dates stipulated in the internal publication calendar. The data are published in a press release bearing INEGI's logo, which details the main results, including explanatory texts of the corresponding indicator, user notes, methodological notes and the main sources of information; it is also highlighted that the information provided was elaborated by INEGI itself.

5.1.5 Statistics not Routinely Disseminated are Made Available Upon Request

The Deputy General Directorate of National Accounts has a general policy of providing only published information, for which aggregations can be made. Upon specific and formal request, data can be provided at greater levels of detail, if this does not violate the principle of confidentiality, and the request is made through formal channels. Micro data sets (stripped of identifying information) are also available. Finally, there is a program for researchers with an approved research proposal to visit INEGI and access its databases, subject to the requirement that no confidential data may leave the INEGI worksite.

Users have many options for communicating with INEGI. INEGI maintains a customer service portal on its website where users' queries and requests for information can be submitted. INEGI also offers specialized services for the media, and the general public can contact them via telephone (free of charge). Electronic services such as massive data download, an Application Programming Interface (APIs), widgets and mobile applications are also available to access the data. All services related to the provision of information, and the information thus provided are free of charge. All publications specify that users can receive information on methodological and conceptual issues in addition to the published information.

5.2 Metadata Accessibility

5.2.1 Documentation on Concepts, Scope, Classifications, Basis of Recording, Data Sources, and Statistical Techniques is Available, and Differences from Internationally Accepted Standards, Guidelines, or Good Practices are Annotated

Metadata for each of the indicators are available on INEGI's website and in printed publications, outlining the data sources and methods used to compile the national accounts. The presentation of the data sources and methods has been standardized across the INEGI. Methodological summaries for the SDDS and OECD metadata for certain economic indicators are prepared according to each agency's specifications and are updated as changes are introduced.

5.1.1 Levels of Detail are Adapted to the Needs of the Intended Audience

Brochures and leaflets on the National Accounts have been prepared and published, and a summary table of the statistical series is included at the end of the regular annual publications.

Most SCNM publications include a section with information on sources and general methods for production accounts, supply and use tables, and institutional accounts, which is updated periodically. A reference is available that has concise descriptions of the main concepts of the National Accounts called "El ABC del Sistema de Cuentas Nacionales de México" (The ABC of the System of National Accounts of Mexico). The metadata documentation covers the basic concepts well but provides insufficient detail on the actual calculation methods to meet the needs of more sophisticated users of the accounts. The sources and methodologies describe definitions, sources of information, coverage and methods for the elaboration of the most recent measurements such as: Other Changes in Volume Account, Revaluation Account and Assets incorporated in the 2013 base.

5.2 Assistance to Users

5.2.1 Contact Points are Publicized

Some of the publications in the INEGI's website provide the name of the area, e-mail, telephone and address of those responsible for the preparation of the data, as well as the telephone number and e-mail address of INEGI's public service section. Users can receive personalized services from the INEGI Consultation and Marketing Centers (CCCINEGI) and at the National Accounts office. In addition, and whenever requested by users, conferences, courses and training on national accounting products are offered to schools, universities, and government units or users who request further explanation on the content of the products. There is a website for children called "Cuéntame de México" (Tell me about Mexico).

Publications include a list of related or complementary information on the last page. The customer service area registers comments and requests for information from CCCINEGI users, as well as those received by e-mail to atencion.usuarios@inegi.org.mx, and directs users' questions to the appropriate area for response. Customer service monitors responses to ensure that questions are addressed in a timely and satisfactory manner. All user inquiries are addressed within 78 hours. The National Accounts microsite on INEGI's website includes a FAQ section.

5.2.2 Publications, Documents, and Other Services, Including Information on Any Charges, are Widely Available

INEGI publishes a catalog of products and services, which is updated annually. It is organized by subject and each title contains a brief description of its contents. Product catalogs are available in print and online, and the price of each item is clearly indicated for services provided and direct online sales. Products and services are offered for sale by CCCINEGI's specialized staff. Order forms are easy to use and contain user-friendly instructions. Electronic services such as massive data download, APIs, widgets, and mobile applications are also available to access the data. In addition to

its publications and website, INEGI provides information to users through YouTube, Twitter, Facebook and RSS feeds. There are 45 INEGI Information Centers spread throughout the country and toll-free numbers available to users.

IMF Staff Recommendations

- Given that INEGI collects and publishes extensive annual and monthly production, expenditure, and income statistics, it is well positioned to compile chained GDP volume indices using previous period annual weights. This would provide an improved estimate of economic growth, especially in periods of structural change. This should be implemented in stages given the communication challenges associated with this type of change. (3.3.2)

- The SNA and *BPM6* recommend that imports and exports are recorded on a change of ownership basis. Currently, both INEGI and BM impute a change in ownership when goods and services cross the customs frontier. Given the importance of Maquila in Mexico, INEGI, in cooperation with the BM should develop experimental estimates of manufacturing services on physical inputs owned by others and subsequently both Institutions could discuss trilaterally with the engaged statistical agencies of the US and Canada for advancing on this matter. Once these estimates are mature, and in coordination with their main trading partners, INEGI and BM should adopt the *2008 SNA* and *BPM6* recommendation. (3.3.2)

- Investigate the feasibility of using satellite images of agricultural land to detect the extent of illegal crops. INEGI should supplement this data with models developed from specialized studies and information on merchandize seized by law enforcement (i.e., Drug Enforcement Administration (DEA), etc.), to develop experimental estimates of illicit crop and drug production, consumption, and exports similar to those used by other countries in the region (DANE). If the estimates are material, INEGI should work to incorporate these measures into official national accounts statistics. (3.3.2)

- Conduct the National Household Income and Expenditure Survey (ENIGH) during a complete calendar year to avoid seasonality in household data so that the ENIGH results can be used in the compilation of national accounts. (3.1.1)

- Produce estimates of replacement cost consumption of fixed capital (CFC) for the general government. The CFC expense should be included in the measure of government output. (3.3.2)

- INEGI periodically undertakes national accounts revision studies and should produce an annual national accounts revision report to be published on its website. (4.3.3)

- Expand the existing national accounts metadata to provide detailed information on calculation procedures to assist users with the interpretation of the national accounts. (5.2.2)

Table 1. Mexico: Data Quality Assessment Framework (June 2021): Summary of Results for National Accounts

(Compiling Agency: National Institute of Statistics and Geography)

Key to symbols: NA = Not Applicable; O = Observed; LO = Largely Observed; LNO = Largely Not Observed; NO = Not Observed; SDDS = Complies with SDDS Criteria[1]

Element	NA	Assessment				Comments
		O	LO	LNO	NO	
0. Prerequisites of quality						
0.1 Legal and institutional environment		X				
0.2 Resources		X				
0.3 Relevance		X				
0.4 Other quality management		X				
1. Assurances of integrity						
1.1 Professionalism		X				
1.2 Transparency		X				
1.3 Ethical standards		X				
2. Methodological soundness						
2.1 Concepts and definitions		X				
2.2 Scope		X				
2.3 Classification/sectorization		X				
2.4 Basis for recording			X			Quarterly government transactions are recorded on a cash basis.
3. Accuracy and reliability						
3.1 Source data		X				
3.2 Assessment of source data		X				
3.3 Statistical techniques			X			Goods for processing are not presented on a net basis. The illegal economy is incomplete.
3.4 Assessment and validation of intermediate data and statistical outputs		X				

[1]**Observed:** Current practices generally meet internationally accepted statistical standards without any significant deficiency. **Largely observed:** There are some departures, but these are not seen as sufficient to raise doubts about the broad observance of standards. **Largely not observed:** Current practices deviate significantly from standards, and major remedial action is required. **Not observed:** Most current practices deviate from standards. **Not applicable:** Used only exceptionally when standards do not apply to a country's circumstances.

Table 1. Data Quality Assessment Framework (June 2021): Summary of Results for National Accounts (concluded)						
3.5 Revision studies		X				
4. Serviceability						
4.1 Periodicity and timeliness		X				
4.2 Consistency			X			Government statistics are not fully reconcilable with government finance data, because of differences in institutional coverage, sectorization, basis of recording, and classification of transactions, assets and liabilities, no reconciliation study has been published.
4.3 Revision policy and practice			X			Specific explanations of significant revisions are usually provided, but revision studies are rarely published, except in the case of the change in the base year.
5. Accessibility						
5.1 Data accessibility		X				
5.2 Metadata accessibility			X			Methods of calculation are explained in general terms, but not at the level of detail needed to understand the specifics of the procedures.
5.3 Assistance to users		X				

GOVERNMENT FINANCE STATISTICS

0. Prerequisites of Quality

0.1 Legal and Institutional Environment

0.1.1 The Responsibility for Collecting, Processing, and Disseminating the Statistics is Clearly Specified

A set of laws, regulations, and associated amendments assign primary responsibility for the collection, processing, and dissemination of fiscal statistics to the Secretariate of Finance and Public Credit (SHCP). Under these laws fiscal statistics on the central government and aggregates for other levels of public sector are compiled and disseminated by the SHCP, in accordance with the terms and conditions established in the following: (a) the Political Constitution of the United Mexican States, last modified on May 28, 2021; (b) the National System of Statistical and Geographical Information Law, last modified on May 20, 2021; (c) the Organic Law of the Federal Public Administration, last modified on January 11, 2021; (d) the Budget and Fiscal Responsibility Federal Law, last modified on May 20, 2021; (e) the Tax Administration Service Law, last modified on December 4, 2018 (f) the Transparency and Access to Public Information Federal Law, dated May 9, 2016 and last modified on May 20, 2021; (g) the Public Debt Federal Law, last modified on January 30, 2018; (h) the Government Accounting General Law, dated December 31, 2008 and last modified on January 30, 2018; and (i) the SHCP By-laws, last modified on December 30, 2019. There are no conflicts between these laws granting legal authority to compile and disseminate fiscal statistics and other laws (including laws on confidentiality).

Article 26 section B of the Constitution states that the State shall have a National System of Statistical and Geographic Information (SNIEG), and that the data it generates will be considered official. It also states that the system will follow principles to allow public access to the information with transparency, objectivity, and independence. The responsibility for setting the norms and coordinating the system will belong to an entity with technical and operating autonomy, legal personality, and its own capital. This entity will have the power necessary to regulate the collection, processing and dissemination of the information generated by the system.

Article 33 of the SNIEG Law states that public entities must follow the norms and principles established by the National Institute of Statistics and Geography (INEGI), when undertaking activities related to the compilation and dissemination of information of national interest, except when authorized by law to undertake such activities. In the latter case, the mandate of the specific law shall be observed.

Article 31 of the Organic Law of the Federal Public Administration assigns to the SHCP, *inter alia*, the tasks of projecting and estimating the revenues and expenditures of the federal government and parastatal entities, and to control public debt operations.

Article 107 of the Budget and Fiscal Responsibility Federal Law states that the SHCP shall provide Congress monthly and quarterly reports on the state of public finances and public debt, while Article 108 states that the SHCP shall establish the guidelines of the Integrated Information System for Government Revenues and Expenditure (SII).

Article 22 of the Tax Administration Service Law states that the Federal Executive shall provide Congress monthly and quarterly reports on the evolution of revenue collection.

Articles 68 and 97 of the Transparency and Access to Public Information Federal Law states that, except for the information deemed restricted and confidential by the law, the SHCP must make information on the economic situation, public finances, and public debt available to the public.

Article 5 of the Public Debt Federal Law states that the SHCP shall keep the debt records of the federal public sector, while Article 27 states that the SHCP shall periodically publish information on the public debt.

The General Law of Government Accounting in its articles 2, 7, 46, 47, 48, 50, 51 and 52 establishes harmonization of the accounting systems for the three levels of government through the National Council for Accounting Harmonization (CONAC) in which the Federation, the states and the municipalities are represented. CONAC is chaired by the SHCP. CONAC sets the financial statements and budgetary reports that the accounting systems must generate for each level of government. The information generated by the accounting systems in each government entity is the official information. These systems must generate information for the national accounts of Mexico and other information required for submissions to the international organizations in which Mexico is a member. In addition, CONAC defines the criteria for the disclosure of information from accounting entities and the content of public accounts.

Article 16 and 16 B of the SHCP By-laws states that the Economic Planning Unit, through the General Directorate of Public Finance Statistics (DGEHP), is responsible for integrating, consolidating, and disseminating timely fiscal statistics on the revenue, expenditure, and financing of the federal government, non-financial parastatal entities, budgetary public sector, and federal public sector. INEGI, CONAC and UCEF are responsible for the design and integration the fiscal information from states and municipalities, and for coordinating the dissemination of fiscal information for public dissemination. Article 18 states that the General Directorate of Public Debt is responsible for compiling the statistical information on the public debt; while Articles 42 and 44 state that the Tax Revenues Policy Unit, through the Adjunct General Directorate of Economic Analysis and Revenue Statistics, is responsible for maintaining a fiscal-economic statistical system.

The task of compiling fiscal statistics on the central government and other levels of the public sector is assigned to two SHCP areas: (a) the General Directorate of Public Finance Statistics, and (b) the General Directorate of Public Debt (DGDP) of the Public Credit Unit. The DGEHP compiles fiscal statistics on the operations of the central government and other levels of the federal public sector, consolidates the statistics on general government operations, and disseminates all fiscal statistics

(including public debt), while the DGDP compiles statistics on central government and federal public sector debt.

Arrangements are in place to promote consistency of methods and results regarding fiscal statistics across agencies involved in their compilation and dissemination. Both the BM and INEGI disseminate in their publications fiscal statistics compiled by the DGEHP and the DGDP. INEGI is responsible for compiling and disseminating fiscal statistics on the operations of the 32 states and 2,054 municipalities (local) governments.

In terms of oversight, the internal control bodies of the executive branch and the Superior Audit Office of the Federation carry out evaluations on the Pubic Accounts, which is the same as that presented in the public finance statistics.

0.1.2 Data Sharing and Coordination Among Data-producing Agencies are Adequate

The DGEHP maintains close communications and information flows with the SHCP departments responsible for compiling statistics related to public finance, and with the departments that manage accounting or financial resources operation centers. In addition, collaboration and information sharing with INEGI and the BM are adequate. Collaboration is close with the departments and units mentioned above, therefore, in addition to the relevant laws and regulations, informal arrangements have been established to streamline coordination and information sharing, allowing the effective and timely flow of source data and fiscal statistics.

The Budget and Fiscal Responsibility Federal Law mandates the Executive to submit to the Congress of the Union, through the SHCP, reports on the economy, public finance, and public debt, no later than 30 days after the end of each quarter, and statistical information on public finance and public debt, 30 days after the end of each month. The statistics included in such reports are compiled by the DGEHP and the DEH and are consistent with the monthly and quarterly fiscal statistics disseminated by the SHCP, in the national and international presentations of the fiscal statistics. The SHCP's Unit of Government Accounting (UCG) compiles and submits annual fiscal statistics to the Congress through the Public Account, by April of the following year. Furthermore, the DGEHP and the DEH provide BM and INEGI information needed to compile timely statistics for the national accounts, balance of payments/international investment position, and external debt statistics. Meeting these deadlines and ensuring timely compilation and dissemination of statistics requires effective coordination and data sharing arrangements and procedures.

There are three units that acquire public sector information, namely, the SHCP, the BM, and the Secretariat of the Office of the Public Function. These three units participate in the Technical Information Committee, which operates the Integrated Information System for Government Revenues and Expenditure (SII) at the SHCP. The purpose of this system is to avoid duplication of effort regarding the collection of information from the various reporting units and entities. Units of the federal government and parastatal entities upload the required information using standardized forms. The users of the SII can in turn access this information.

The collection of data for producing the INEGI report entitled Government Finance Statistics of States and Municipalities (EFIPEM) is developed with the support of the INEGI regional staff in each of the states. These staff are responsible for collecting and monitoring the timely supply of data to the central office. The collection of data is undertaken by the State Finance Offices, Municipalities Treasuries and Control Organs. INEGI continuously trains these regional field staff to keep them up to date on methodological and conceptual changes in the regulations regarding the compilation and presentation of fiscal statistics.

0.1.3 Individual Reporters' Data are Kept Confidential and Used for Statistical Purposes Only

The confidentiality of data received from respondents is protected by the National System of Statistical and Geographical Information Law. Article 38 of the law states that data and reports provided by individuals for statistical purposes or obtained from administrative records must be handled in accordance with the principles of confidentiality and secrecy.

The Federal Law on Transparency and Access to Public Information also regulates the confidentiality of information held by public sector entities and articles 97 to 117 of the Law establish the criteria to be used to determine the government information that is to be treated as permanently confidential or as restricted.

In the case of the decentralized public sector agencies (including government corporations), information is presented on individual entities, but care is always taken to maintain confidentiality on aspects necessary for the proper management of the entity in question. Decentralized agencies are aware of the rules and procedures regarding the confidentiality of information reported.

Article 7 of the General Law on the Administrative Responsibilities establishes, *inter alia*, the obligation of all civil servants to observe, in the performance of their employment, position or commission, the principles of discipline, legality, objectivity, professionalism, honesty, loyalty, impartiality, integrity, accountability, effectiveness and efficiency that govern the public service. Any failure to meet this obligation may incur sanctions, including dismissal. The law is available on the SHCP website: http://www.ordenjuridico.gob.mx/leyes#gsc.tab=0.

0.1.4 Statistical Reporting is Ensured Through Legal Mandate and/or Measures to Encourage Response

Article 33 of the National System of Statistical and Geographical Information Law states the obligation of all units of the federal government, states, and municipalities to provide to INEGI directly or through its coordinating agency the information it may request.

For the federal public sector, there are legal and administrative provisions for collecting the information necessary for the compilation of fiscal statistics. Article 5, 14, 107, and 108 of the Budget and Fiscal Responsibility Federal Law establish the obligation of all units of the federal public sector to provide SHCP the information necessary to prepare the monthly and quarterly reports to Congress, as well as the Federal Public Account; and to submit information to the SII in accordance

with the guidelines set on data structure, deadlines, and reporting modalities. Article 10 of the Parastatal Entities Federal Law states that parastatal entities are required to provide to other entities in the sector in which they are grouped, as well as to the State Secretariats and Administrative Departments, any information or data they may request. Lastly, the Decree Approving the Expenditure Budget of the Federation establishes that all entities are required to provide any information necessary for monitoring the budget within the deadlines stipulated. The General Law of Government Accounting indicates the financial and budgetary information that the accounting systems of the three levels of government must generate.

The National Council for Accounting Harmonization (CONAC) has the power to standardize accounting, financial and budgetary regulations, account plans, financial statements, budget reports and other information that apply to the Federal Government, States and Municipalities for fiscal statistics, national accounts, and other statistics reported to international organizations in which Mexico is a member. Three catalogs stand out for the preparation of public finance statistics: The Economic Classification of Income, Expenditure and Public Financing; the Administrative Classification and the Functional Classification.
https://www.conac.gob.mx/es/CONAC/Normatividad_Vigente.

In addition, based on articles 7, 9,50 and 51 of the Government Accounting Law, CONAC issues criteria for the preparation and standardized presentation of financial information referred to in the Law of Financial Discipline of Federal Entities and Municipalities.
http://www.diputados.gob.mx/LeyesBiblio/ref/lgcg.htm.

Based on recommendations by the IMF and OECD, INEGI has recently developed procedures to strengthen the timeliness of data collection from the 32 states and 1,100 municipalities (including 300 municipalities that account for approximately 75 percent of total municipal revenue). As a result, annual statistics on states and this representative group of municipalities are disseminated with a lag of nine months (270 days) in the EFIPEM report (compared with 365 days previously).

0.2 Resources

0.2.1 Staff, Facilities, Computing Resources, and Financing are Commensurate with Statistical Programs

The human resources assigned to compiling fiscal statistics are adequate to perform current tasks. There are 43 staff working on fiscal statistics, of which 15 focus on public debt. The practice of eliminating positions following staff retirements has been discontinued. Staff training in methodological aspects is mainly internal, and some staff have taken courses on government finance statistics (GFS) at the IMF Capacity Development Institute, including the latest online courses on GFS and public debt statistics. Opportunities are limited for staff rotation.

The physical facilities, furniture, and equipment are adequate. The necessary resources are available in computer hardware, services (maintenance and development) and other information technologies. However, the demands of the fiscal statistics program and some restrictions for new

developments and IT support have increasingly put stress on these resources, placing the timely compilation and dissemination of quality fiscal statistics at risk. Funding is reasonably secure for the existing identified needs of the statistical program.

INEGI has introduced a remote training program for the staff of Regional Directorates and State Coordinating Agencies. The program aims to train field staff in the collection of data from states and municipalities.

For the compilation of statistics for states and municipalities, INEGI has reliable and trained human and computational resources, as well as adequate facilities for developing these specific activities. Computer hardware and software are supported by the INEGI Informatics Directorate, which has an assigned budget for this purpose.

0.2.2 Measures to Ensure Efficient Use of Resources are Implemented

Periodic evaluations are carried out on SHCP personnel and processes have been reviewed to automate the compilation and generation of information, as well as the use of standardized catalogs to code information, allowing different presentations of the information to be generated. The SHCP currently has a project to improve the financial information systems, which could include reviewing the conceptual framework (accounting and budgeting), and the inputs and outputs that the SHCP systems should generate.

The costs associated with the compilation of fiscal statistics are not directly calculated and there is no confirmed information on whether the available resources are used as efficiently as possible. It is difficult to calculate costs directly, in part because many expenses related to administrative systems serve multiple purposes. Staff costs are measured. Moreover, budgeting procedures allow cost control and allocation of resources. The increasing adoption of automated processes for compilation of statistics has resulted in substantial savings in terms of the person-hours for such tasks.

In INEGI, the unit in charge of audits and controls conducts audits to ensure the efficient use of resources for the elaboration of government finances statistics from states and municipalities.

0.3 Relevance

0.3.1 The Relevance and Practical Utility of Existing Statistics in Meeting Users' Needs are Monitored

Fiscal statistics follow the same time horizon as the budget elaboration and monitoring process, and are the main statistics used to take decisions on fiscal policy matters. The methodology and classification structure satisfy the needs of official users, with data presented with a national methodology used for budget monitoring. Annual data using the *GFSM 2014* framework for the federal public sector and its subsectors are compiled and disseminated to international users.

The SHCP website, where fiscal statistics are disseminated, provides a telephone number and e-mail address for users to request additional information, ask methodological questions, and express their

views on the statistics. New data requirements originate mainly from information requirements of the budgetary process by official users. In addition, periodic meetings with non-official users occur in collaboration with international organizations (e.g., during IMF ROSC missions on fiscal transparency (in 2018) and statistics (this 2021 report). Moreover, the SHCP Investor Relations Office coordinates conference calls and other meetings with investors, investment banks, rating agencies, etc., that use fiscal statistics and provide related feedback.

INEGI, through its Committee for Quality Assurance (CoAC), carries out an analysis of the EFIPEM report for relevance. The results are available in the CoAC Results Report (Relevance Indicators, page 18, https://extranet.inegi.org.mx/calidad/doc/5_Informe_calidad_2020.docx).

In addition, the INEGI website offers contact information for users to provide feedback on statistics (of which about 4-5 requests per month concern state and municipal fiscal statistics). Moreover, INEGI, through committees in states, garners feedback from users regularly.

0.4 Other Quality Management

0.4.1 Processes are in Place to Focus on Quality

The SHCP is fully aware that quality is the key for maintaining public confidence in fiscal statistics. To this end, a major effort has been under way for several years to compile and disseminate more statistics, with increasing coverage and timeliness. The broader fiscal indicator, *the public sector borrowing requirement*, is a fiscal anchor is in line with international guidelines.

There is currently a project to strengthen the financial information system, which is receiving technical assistance and financing from the World Bank. It is expected that a modernized financial information system will enhance the availability of budgetary and financial data.

INEGI, through its CoAC, implemented the Generic Statistical Business Process Model (GSBPM) which describes in detail the activities that are carried out to produce standardized statistical and geographic information. In this sense, the EFIPEM report is in line with INEGI's various standardized statistical programs. In addition, Mexico participates in and observes the Special Data Dissemination Standards (SDDS).

0.4.2 Processes are in Place to Monitor Quality During the Planning and Implementation of the Statistical Program

Mechanisms are in place for assessing the quality of the compilation and dissemination of fiscal statistics. These mechanisms are oriented primarily to ensuring the consistency of the primary information with the resulting statistics. In particular, steps have been taken to encourage automation of the various processes that produce and cross-check data.

The UCG approves the accounting rules applicable to all accounting units. Thus, all units of the centralized public administration use the same chart of accounts. The State Productive Corporations (Pemex and CFE) use a different chart of accounts that follows criteria used in private accounting,

provide information following standardized catalogs, which also are approved by the same Unit. Consequently, fiscal data are compiled and verified in accordance with prevailing accounting rules.

Procedures have been established for controlling the quality of the information submitted to the SII. The information must be consistent with that provided in other forums, identified as preliminary or final, include explanations of any major changes compared with previous versions, and it must be accurate (it is not valid to omit data or make estimates). When the information is received, it is validated in terms of catalogs and consistency.

While there are no formal processes for assessing the quality of the statistics and the published information, continuous efforts are made to ensure internal data consistency and to improve their quality in general. The standardization of the charts of accounts and budget catalogs, advances in financial management systems and process automation contribute to improving the quality of the statistics. In addition, the internal control bodies of the executive branch and the Superior Audit Office of the Federation carry out evaluations on the information reported to Congress, which is the same as that presented in the public finance statistics.

Regarding state and municipal statistics, through the GSBPM, INEGI describes eight phases of statistical production activities. In addition, the CoAC establishes guidelines and other internal policy documents guaranteeing institutional quality. Furthermore, the EFIPEM report makes use of the same accuracy and reliability indicators generated for other statistical programs that use administrative records as inputs. The indicators used in EFIPEM report related to coverage, non-response at the unit level and non-response at the variable level.

1. Assurances of Integrity

1.1 Institutional Integrity

1.1.1 Statistics are Produced on an Impartial Basis

Article 26 section B of the Constitution grants INEGI technical and operating autonomy. Article 7 of the General Law on the Administrative Responsibilities states that it is the duty of all civil servants to act in accordance with what the laws, regulations and other legal provisions attribute to their employment, position, or commission, so they must know and comply with the provisions that regulate the exercise of their functions, powers and responsibilities.

Fiscal statistics are compiled based on accounting and administrative records, which follow charts of accounts and budgetary rules derived from the legal framework. Also, compilation practices are described in methodological notes posted on the SHCP website.

1.1.2 Choice of Data Sources and Statistical Techniques as well as Decisions About Dissemination are Informed Solely by Statistical Considerations

Statisticians are free of political influence in the choice of the most appropriate data sources and methods for compiling fiscal statistics, and changes in statistical procedures are made based on technical, rather than political, criteria. Data sources are selected according to the basis of recording and the availability of the information needed to compile quality statistics. The choice of compilation methods is dictated by the objective of measuring the public sector borrowing requirement from a national budget monitoring standpoint, and the Financial Requirements of the Public Sector, which according to the definition in the LFPRH (Ley Federal de Presupuesto y Responsabilidad Hacendaria) corresponds to net lending/borrowing in the *GFSM 2014*.

Dissemination of statistics is based solely on statistical considerations, and generally follows international standards regarding dissemination calendars, periodicity, timeliness, and coverage. Also, since 1996 Mexico has subscribed to the SDDS.

1.1.3 The Appropriate Statistical Entity is Entitled to Comment on Erroneous Interpretation and Misuse of Statistics

Fiscal statistics are disseminated by the General Directorate of Public Finance Statistics, in coordination with the SHCP Social Communication Unit (Press Office). The latter's role also includes monitoring press coverage and issuing any necessary clarifications for the proper interpretation of statistics. In addition, when fiscal statistics are disseminated, a press release is distributed to announce the event. Press releases on monthly fiscal statistics highlight the principal results for the month, while those associated with quarterly fiscal statistics include an interpretation by the authorities of the principal results. Finally, methodological notes are posted on the SHCP website to facilitate understanding of the statistics. Compilers of fiscal statistics are authorized to address queries about technical aspects and to respond to requests by users for further information. They are, however, not allowed to express opinions on government policies.

1.2 Transparency

1.2.1 The Terms and Conditions Under which Statistics are Collected, Processed, and Disseminated are Available to the Public

The laws, regulations, methodologies, and manuals for classifying expenditure that govern compilation and dissemination of fiscal statistics are available to the public on the SHCP website. There are no explicit restrictions on the aggregate information produced by the DGEHP, and users can be provided with any further information they may request, provided it is available and the rules of confidentiality of the information are observed.

The procedures authorizing the dissemination of fiscal statistics are deemed internal arrangements and are not published. The dissemination of the statistics is authorized by the Head of the Economic Planning Unit. In accordance with the Transparency and Access to Public Information Federal Law,

the manuals on procedures must be made available to the public upon request. A citizen can request the documents from the SHCP if they are not restricted or confidential.

The EFIPEM contains a Methodological Synthesis section with a description of the methodology used, collection methods, processing, analysis, and dissemination. Likewise, the metadata are published under the G-20-Data Documentation Initiative (DDI). This information is disseminated through the INEGI website (https://www.inegi.org.mx/programas/finanzas/).

1.2.2 Internal Governmental Access to Statistics Prior to Their Release is Publicly Identified

No official or public agency outside of the SHCP has access to fiscal statistics prior to their dissemination. These statistics are released simultaneously to the general public through the SHCP website. Congress receives a monthly report required by the LFPRH just minutes before their public release. This congressional prior access is disclosed to the public on the SHCP website that provides the monthly report. Also, as indicated in section 1.1.3 above, a press release is issued informing the public of the availability of the statistics. No entity external to INEGI has access to EFIPEM data prior to its dissemination.

1.2.3 Products of Statistical Agencies/units are Clearly Identified as such

The compilation of fiscal statistics is a task assigned exclusively within SHCP to the DGEHP and the DGDP. Within INEGI the task is assigned to the Public Sector Statistics Department. The reports disseminated by the SHCP identify the area responsible for their compilation. The reports disseminated by the BM and INEGI identify the Economic Planning of Public Finance Unit as the source of the information for federal government finance statistics. The publications printed or posted on the INEGI website identify the producer of the information.

1.2.4 Advance Notice is Given of Major Changes in Methodology, Source Data, and Statistical Techniques

Methodological changes are usually described in the Draft Expenditure Budget of the Federation and in the General Economic Policy Criteria for the relevant year. Such changes are normally indicated in footnotes to fiscal statistics. Similar procedures apply to the recording of special operations and other methodological changes (e.g., in institutional coverage).

For states and municipalities methodological changes are notified on the EFIPEM report website as annotations on the disseminated information. Methodological details and metadata are also published through updates to the Methodological Synthesis and DDI, both publicly available on the INEGI website (https://www.inegi.org.mx/programas/finanzas/).

1.3 Ethical Standards

1.3.1 Guidelines for Staff Behavior are in Place and are Well Known to the Staff

In compliance with Article 7 of the National System of Statistical and Geographical Information Law, INEGI has issued a code of ethics that regulates the standards of behavior to be followed by all staff that undertakes statistical and geographic activities, and that is available to the public on its website.

Article 7 of the General Law on the Administrative Responsibilities establishes the duties that civil servants must observe in the performance of their employment, position or commission. These principles cover discipline, legality, objectivity, professionalism, honesty, loyalty, impartiality, integrity, accountability, effectiveness, and efficiency that govern the public service. The sanctions envisaged in the Law are applied in practice, including dismissal in certain cases.

2. Methodological Soundness

2.1 Concepts and Definitions

2.1.1 The Overall Structure in Terms of Concepts and Definitions Follows Internationally Accepted Standards, Guidelines, or Good Practices

The compilation and dissemination of public finance statistics is carried out under two methodologies: a) the traditional one that follows national definitions and concepts; and b) the public sector borrowing requirement (PSBR) and related statistics, an international presentation that aims to follow the *GFSM 2014*. As of 2014, the Budget Law establishes an annual goal for the PSBR and the associated debt balance, which are the control variables for fiscal policy and for the evaluation of fiscal sustainability. The compilation and dissemination of the traditional fiscal statistics follows national concepts and definitions, which are built on the recommendations in *A Manual on Government Finance Statistics, 1986* (*GFSM 1986*).

Regarding the PSBR (international) presentation, there are conceptual and definitional differences from the *GFSM 2014*. This PSBR uses some concepts and definitions that differ from the *GFSM 2014* (such as "operational balance" and the composition of "total spending" (Gasto Total) and "total revenue" (Ingreso Total). Other examples include the absence of consumption of fixed capital as well as the absence of recording any "other economic flows." Given the exclusion of the BM from the definition of the public sector, transactions and positions in Monetary Gold and SDRs also are not recorded. Moreover, the basis of recording of liabilities and assets is primarily on a cash basis. Accounts payable and accounts receivable reflect the reconciliation between the recording of transactions associated with financial instruments and cash flows, rather than accounts payable and accounts receivable as in the *GFSM 2014*.

While there is no explicit plan to fully adopt the *GFSM 2014*, the SHCP has begun to implement a set of internal actions consistent with a *GFSM 2014* migration path. Progress has been made in recent months to publish annual balance sheets and operating statements for three levels of general

government of the federal public sector, along with the dissemination of associated metadata. In addition, there have been actions to improve the frequency and timeliness of the operating statements. Moreover, quarterly and annual statistics for the consolidated general government sector (with an operating statement and associated balance sheet and with a lag of about four months) are being disseminated as of June 2021. However, corresponding detailed tables following the *GFSM 2014* recommended presentation have not yet been disseminated. One specific *GFSM 2014* migration action includes preparations to disseminate monthly balance sheet information for the Federal Public Sector (the entire public sector, except for the central bank). As noted, INEGI has implemented measures to improve the timeliness of annual state and local government information.

Information on the central government sector (and budgetary central government sector) operating statements through net lending/net borrowing (PSBR) is reported to STA monthly for the IMF *International Financial Statistics* (*IFS*) publication and annual general government (and subsectors) statistics (revenue and expense) with an 18-month lag for the IMF *Government Finance Statistics Yearbook* (*GFSY*). At the time of the 2021 Data ROSC mission monthly *IFS* data were disseminated for 2018M1–2021M3, 2014Q1–2021Q1, and 2008-2020; similarly, *GFSY* data were disseminated for 2005-2018 for the general government and 2005-2019 for the central government.

2.2 Scope

2.2.1 The Scope is Broadly Consistent with Internationally Accepted Standards, Guidelines, or Good Practices

To facilitate understanding the scope of the fiscal statistics, and their relationship to international standards, the structure of the federal public sector is set out and discussed below.

Federal Public Sector

I. Autonomous Bodies and Entities

1. Legislature
2. Judiciary
3. Autonomous entities (National Electoral Institute, National Commission on Human Rights, National Institute of Statistics and Geography, Federal Commission for Economic Competition, Federal Telecommunications Institute, National Institute for Access to Information and Protection of Personal Data, the National Institute of Statistics and Geography and the Attorney General's Office).

II. Federal Executive

A. Centralized Public Administration

1. State Secretariats
2. Secretariat Agencies (without legal personality or own capital, attached to a secretariat)
3. Agrarian Courts

4. Federal Court of Fiscal and Administrative Justice
5. Legal Advisory Office to the Federal Executive

B. Parastatal Public Administration

1. Decentralized Agencies (with legal personality and own capital)
2. Entities with majority state ownership
3. State Productive Corporations
4. National Credit Corporations (development banks)
5. Trusts with an organic structure, financial and nonfinancial
6. Bank of Mexico

The following definitions related to the institutional coverage of fiscal statistics used by the authorities are also useful to better understanding their scope:

Federal government: Autonomous bodies and entities, plus the centralized public administration (I+IIA);

Central government: Federal government plus social security (Mexican Social Security Institute (IMSS), State Workers Security and Social Services Institute (ISSSTE) (I+IIA+two decentralized agencies);

General government: Central government, plus state governments (states and Mexico City), plus local (municipal) governments;

Budgetary public sector: Federal government, plus five nonfinancial parastatal entities (Mexican Petroleum (Pemex), Federal Electricity Commission (CFE), IMSS, ISSSTE (I+IIA+four decentralized agencies);

Parastatal entities: entities that belong to the parastatal public administration (IIB);

Entities under indirect budgetary control (167 entities): nonfinancial public sector, minus budgetary public sector (IIB.1 less Pemex, CFE, IMSS, and ISSSTE, + IIB.2 nonfinancial+ IIB.4 nonfinancial);

Nonfinancial public sector (NFPS): Federal government, plus nonfinancial parastatal public administration (I+IIA+IIB nonfinancial);

Federal public sector: Nonfinancial public sector, plus financial parastatal public administration (I+IIA+IIB nonfinancial +IIB financial);

Public/economic balance or deficit/surplus of the NFPS: Revenue minus expenditure of the budgetary public sector, plus the deficit/surplus of the non-financial entities under indirect budgetary control;

Public sector borrowing requirement (PSBR): Public balance (deficit/surplus) of the NFPS, plus financing requirements for other NFPS transactions not included in the public balance, plus the financing requirements of development banks and financial trusts.

National/Traditional Presentation of Fiscal Statistics

The institutional coverage of the national fiscal statistics for the consolidated central government differs from the international guidelines (*GFSM 1986, GFSM 2001 and GFSM 2014*) because it does not include the decentralized agencies (IIB1) engaging in noncommercial activities. This difference also applies to the general government coverage. However, these decentralized agencies do not engage in financing operations and most of their revenue consists of transfers from the federal government—duly presented as federal expenditure. As a result, the institutional coverage of the fiscal statistics for federal government plus social security includes virtually all the operations of the consolidated central government, as defined by international standards. The institutional coverage of the Central Nonfinancial Public Sector excludes state and local governments but includes two nonfinancial public corporations (Pemex and CFE).

The DGEHP posts monthly tables on the SHCP website (http://presto.hacienda.gob.mx/EstoporLayout/estadisticas.jsp), under Estadísticas Oportunas de Finanzas Públicas [Timely Public Finance Statistics], that provide cumulative data on the financial position of different levels of the public sector (excluding the central bank): of the federal government, consolidated central government, budgetary public sector, and Central Nonfinancial Public Sector. This website also disseminates data on public debt, the financing requirement of the public sector, and other statistics (especially on total external debt of the economy). The traditional/national set of fiscal statistics do not include routine compilation of general government statistics (as defined in the *GFSM 1986*).

Every month the BM publishes fiscal statistics on its website (https://www.banxico.org.mx/SieInternet/consultarDirectorioInternetAction.do?sector=9&accion=consultarDirectorioCuadros&locale=es). This contains, *inter alia*, fiscal statistics compiled by the DGEHP, focusing on revenue and expenditure by the federal government, budgetary public sector, and Central Nonfinancial Public Sector. On an annual basis, the INEGI disseminates (revenue and expenditure) statistics on the 32 states (including the Mexico City) and 2,400 municipalities on its website (https://www.inegi.org.mx/temas/finanzas/).

International/GFSM 2014 Presentation of Fiscal Statistics

In April 2021, the SHCP published a document entitled "Fiscal Balance in Mexico: Definition and Methodology" [Balance Fiscal en Mexico: Definicion y Metodologia] on its website (http://presto.hacienda.gob.mx/EstoporLayout/metodologias.jsp), which contains annual fiscal data based broadly on the *GFSM 2014*. Monthly information is also published in the public finances reports on its website:

https://www.finanzaspublicas.hacienda.gob.mx/es/Finanzas_Publicas/Informes_al_Congreso_de_la_Union.

The scope of fiscal statistics in this international presentation (operating statements and balance sheets), which are based broadly on the *GFSM 2014*, contains annual data for the central government sector, the nonfinancial public sector, and the public sector. The scope of the central government follows international standards and includes: the Federal Government plus all three social security funds (including the Social Security Institute of the Mexican Armed Forces) as well as entities that undertake most of their activities as if they were part of the central government (such as hospitals, centers of investigation, educational institutes, regulatory bodies, among others). The scope of the nonfinancial public sector includes the previous list of entities for the central government plus: entities and public corporations (specifically, PEMEX, CFE, FONATUR, PMI, and Administradoras Portuarias Integrales). However, the nonfinancial public sector excludes states and municipalities. The scope of the public sector includes the previous list of entities for the nonfinancial public sector plus: financial entities (development banks, investment funds and financial auxiliaries); however, it does not include the central bank.

While the operational statements and balance sheets correspond to the *GFSM 2014* ,tables, detailed statements on the Sources and Uses of Cash, Operating Statement, Other Economic Flows, and Balance Sheets are not published. Operational statements are primarily compiled on a cash basis.

In June 2021, the SHCP began disclosing information on quarterly (for the first quarter in 2021) general government operations and balance sheets (except for municipalities), together with annual general government operations and balance sheets (for 2020) and is in broad accordance with the *GFSM 2014*. The lag is less than three months from the reference quarter. With this information, a public debt indicator is presented according to the *GFSM 2014* for the general government (again, excluding municipalities). For the moment, the presentation does not include detailed tables.

The INEGI EFIPEM report releases annual information on the revenue and expenditure of the 32 states and a sample of 1,100 municipal governments, with a lag of 270 days. Information on the remaining 1,340 municipalities is disseminated with a lag of 17 months.

2.3 Annual General Government Statistics are Compiled as Part of the International Set of Statistics and are Disseminated via the IMF *Government Finance Statistics Yearbook* (*GFSY*) with a Lag of about 18 Months. General Government Operations Data Consistent with International Standards is Absent from the SDDS Dissemination.[2] Classification/sectorization

2.3.1 Classification/sectorization Systems Used are Broadly Consistent with Internationally Accepted Standards, Guidelines, or Good Practices

The two presentations of fiscal statistics (the traditional/national presentation and the international PSBR/*GFSM 2014* presentation), generally align with the public sector definition as defined in the *2008 SNA* and the sectors and subsectors of the public sector outlined in the *GFSM 1986* or *GFSM 2014*. Dissemination of quarterly consolidated general government statistics (operational statements and balance sheets, including debt statistics) using the international presentation took place in June 2021. The government finance statistics for the budgetary central government, the consolidated central government, state governments, local governments are disseminated separately (with the caveats mentioned in section 2.2).

National/Traditional Presentation of Fiscal Statistics

Fiscal statistics under the national presentation are provided separately for the various levels of government. The classification of revenue, expenditure, financing, and debt is in accordance with national concepts and definitions, broadly similar to those recommended in the *GFSM 1986*, but with major presentation differences. In general, a link can be established between the national classifications and those recommended in the *GFSM 1986*. Specifically, federal (and central) government revenues are classified as established in the Federation's Fiscal Code, into taxes, social security contributions, and non-tax revenue, with sub-classifications of tax revenues and non-tax revenues. The revenue of the parastatal entities is classified into sales of goods and services, social security contributions, and financial and other products. Various internal standards define these concepts, not always in line with international guidelines. The principal differences are: (a) the total amount collected as federal taxes is recorded under tax revenue of the federal (and central) government, including the portion allocated to other levels of government under fiscal coordination agreements in return for transferring their tax powers to the Federation (share of federal revenue to federative entities); (b) the non-tax revenues of the federal (and central) government are defined by law, and include revenues from administrative fees and duties that bear no relationship to the service provided (for hunting, fishing, import, and commercial vehicle permits); and (c) revenues

[2] The SDDS Guide (https://www.imf.org/external/pubs/ft/sdds/guide/2013/sddsguide13.pdf) states: "The comprehensive statistical framework for the fiscal sector may be either GGO [general government operations] or PSO [public sector operations]. GGO covers operations of all governmental units (including social security systems) whether operating at the central level, state/provincial/region level, or local level. PSO covers operations of the general government, public nonfinancial corporations, and public financial corporations. The financing requirements should be consistent with the units covered (GGO or PSO). The SDDS metadata should describe the general government units (or public sector units) covered and not covered by the GGO (or PSO) data disseminated on the NSDP.

from investment in financial assets are recorded as non-tax revenue, and not under lending minus repayments in expenditure. Revenues are also classified by institution receiving the revenue, and by whether it is derived from oil related activities.

Expenditures are classified in accordance with the current Classifier by Purpose of Expenditure, which allows for the identification of expenditure by economic type, that is, as current expenditure and capital expenditure, and includes sub-classifications (salaries and wages; materials and supplies; general services; subsidies and transfers; and physical investment; etc.). A functional classification of expenditures is also used, grouping together expenditure items by public sector activity, into three major functions: (a) social development, (b) government functions, and (c) economic development. These groups are subdivided by specific function. In addition, an institutional classification of expenditures is used in accordance with the Expenditure Policy Guidelines for the corresponding year which, for budgetary purposes, groups federal government expenditure into administrative branches and general branches. The former is associated with the activity of a department, and the latter relates to overall expenditure items that cannot be associated with the activity of a department. The expenditures of parastatal entities are identified by entity.

Expenditures are also classified as programmable or non-programmable. The former contains expenditure directly associated with a program for carrying out government functions and social or productive activities, while the latter contains expenditure used by the public sector to fulfill its obligations, such as interest payments, transfers to states (of federal revenues), debit items from previous financial years, and expenditures incurred on behalf of third parties.

The main differences between the national concepts of expenditure and the *GFSM 1986* recommendations are: (a) the so-called third party operations are recorded as expenditure, these include transactions on behalf of third parties by the federal government and operations pending budgetary regularization that cannot be classified in a timely fashion; (b) the financial cost is presented net of interest revenue, and includes in addition to interest, commissions and expenditures associated with public debt, as well as the fiscal cost derived from programs in support of bank debtors and soundness of the financial system; and (c) loans and equity contributions for policy purposes are recorded as capital expenditure, and not under lending minus repayments.

Financing is classified as domestic or external. In turn, domestic financing is divided into central bank, banks and other financial institutions, and the private sector. Financing is also classified as federal government and agencies and enterprises. There is no domestic financing classification by instrument, nor any classification of external financing by instrument or by holder.

Federal government debt is classified as domestic or foreign, and presented both in nominal terms and as percentage of GDP. Domestic debt and foreign debt flows and stocks are classified by instrument, but not by holder. The social security and decentralized agencies that conceptually form part of central government have neither domestic nor foreign debt. Debt guaranteed by the federal government is classified by beneficiary and is not broken down into domestic and foreign debt.

Federal public sector debt is classified as domestic or foreign. The external debt of the NFPS and the federal public sector is classified by location of the issuance of the instrument, by direct debtor to the rest of the world, by user of the resources, by country and currency, and by term; but it is not classified by residence of the creditor.

The classification of financing and debt as domestic or foreign is not classified based on the residence of the counterparty to the liabilities, instead it is classified by place of issue of the liabilities. Accordingly, domestic financing or debt is the one contracted on the local market and payable within Mexico in domestic or foreign currency, while foreign financing or debt is the one contracted abroad and payable abroad in domestic or foreign currency. (Surveys are not carried out to determine the residence of debt holders.)

The treatment of stabilization funds and related transactions is not in accordance with *GFSM 1986* recommendations, which would consider them as financial entities and transactions, whether the stabilization funds are a general government unit or a financial unit. There is an oil stabilization fund and other stabilization funds that aim to stabilize the flow of funds to government from oil and other resources. These stabilization funds are government trust funds at the Nacional Financiera (NAFIN), and their accounts are not incorporated into the fiscal statistics (as these are considered financial entities). The flow of funds from the government to the stabilization funds are classified as expenditure (capital expenditure in financial investment), and from the stabilization funds to the government as revenue (non-tax revenue). The oil stabilization fund engages in oil price hedging transactions using financial derivatives through the BM. These hedging transactions on the price of oil are treated as financial transactions of the stabilization fund and are not reflected in the national presentation of the government accounts. This is corrected in the measurement of the PSBR.

CONAC standardizes the catalogs of income, expenses and financial statements of the states and municipalities. The statistics for states and municipalities are classified as revenue and expenditure; however, revenue includes receipts for bonds issued and loans incurred, and expenditure includes outflows stemming from amortization (as well as interest payments). Thus, these statistics mix financial transactions with operational flows. If cash and deposits could be compiled, and these financial transactions were classified following the *GFSM 2014* framework, these statistics could show most of the financial transactions of state and local governments.

International/GFSM 2014 Presentation of Fiscal Statistics

In April 2021, the SHCP published a document entitled "Fiscal Balance in Mexico: Definition and Methodology" [Balance Fiscal en Mexico: Definicion y Metodologia] on its website (https://www.secciones.hacienda.gob.mx/work/models/estadisticas_oportunas/metodologias/1bfm.pdf), which contains annual fiscal data based broadly on the *GFSM 2014*.

Classification in the international presentation follows the framework of the *GFSM 2014*; however, no detailed tables are provided for the classification of revenue, the economic classification of expense, transactions by instruments in nonfinancial assets, financial assets and liabilities, or the transactions of financial assets and liabilities classified by sector of the counterparty to those financial instruments. In addition, other classifications that do not follow the *GFSM 2014* include: 1) the

possible absence of the recording of equity transactions for certain public corporations; and 2) the recording of accounts receivable and accounts payable. Currently, accounts receivable and accounts payable represent the reconciliation differences between stocks and flows for debt instruments and not actual accounts receivable and payable as found on financial statements.

2.4 Basis for Recording

2.4.1 Market Prices are Used to Value Flows and Stocks

National/Traditional Presentation of Fiscal Statistics

Revenue, expenditure, financing, and the public balance are presented on a modified cash basis. For budget monitoring purposes these include: (a) cash transactions; (b) offset operations (not involving cash movements) between revenue and expenditure and between expenditure and financing; and (c) operations in kind, at commercial value.

Debt is considered domestic if the currency of issue is Mexican pesos and so domestic debt and related transactions are recorded in domestic currency. Gross domestic debt is recorded at face value, except in the case of treasury bills (*CETES*), which are recorded at discount value. Gross external debt also is recorded at face value. Market values are not used.

All debt-related transactions are recorded at the time of their placement and on the dates when principal and interest are paid. External debt transactions in currencies other than in U.S. dollars are converted into U.S. dollars at the exchange rate provided by the BM, at the end of the reference period and not the rate at which each transaction took place or the average for the day the transaction occurred because information is not available. To convert dollar denominated debt to national currency the Mexican peso: U.S. dollar exchange rates published by BM on its website are used. External debt stocks also are converted using the end-of-period exchange rate.

International/GFSM 2014 Presentation of Fiscal Statistics

Stocks of nonfinancial assets are presented at their historical value (the cost at the time of acquisition/issue) and financial assets and liabilities are presented at their nominal value (the amount at any moment in time that the debtor owes the creditor). Market values are not used. In the balance sheet, positions in other currencies are presented in pesos using the end-of-period exchange rate provided by the BM. Transactions in foreign currency are not converted to local currency using the mid-point exchange rate prevailing in the market at the moment they take place.

2.4.2 Recording is Done on an Accrual Basis

National/Traditional Presentation of Fiscal Statistics

The national presentation of fiscal statistics uses a cash basis of recording, for the most part. Transactions are recorded when the Treasury of the Federation (Treasury) transfers the liquid

resources in the banking system to the beneficiary. Recording is consistent with the guidelines of the *GFSM 1986*.

International/GFSM 2014 Presentation of Fiscal Statistics

The basis of recording is the same as for the national presentation, primarily on a cash basis. The accounting systems in place capture cash, accrual, and other bases of recording. A move to an accrual accounting basis, consistent with *GFSM 2014* standards is being progressively implemented. Work is underway to collect both cash and accrual bases of recording in the fiscal statistics. However, a Statement of Sources and Uses of Cash, as outlined in the *GFSM 2014* is not compiled or disseminated. For data on state and municipal governments, the INEGI EFIPEM report contains data on a modified accrual basis (payment orders) for revenue and expenditure (including transactions in securities and loans).

2.4.3 Grossing/netting Procedures are Broadly Consistent with Internationally Accepted Standards, Guidelines, or Good Practices

National/Traditional Presentation of Fiscal Statistics

All transactions are expressed on a gross basis, except for financing transactions and the acquisition of goods for resale by parastatal entities (change in inventories), which are correctly shown on a net basis.

International/GFSM 2014 Presentation of Fiscal Statistics

In the international methodology all transactions are expressed on a gross basis, except for borrowing and amortization. For income and expenses corrective transactions are netted against the original transactions, such as for tax refunds and overpaid expenses.

3. Accuracy and Reliability

3.1 Source Data

3.1.1 Source Data are Obtained from Comprehensive Data Collection Programs that Take Into Account Country-specific Conditions

The main sources of information for the compilation of fiscal statistics on the federal government are the administrative and accounting systems that monitor budget execution and cover all budgetary units. These include SIAF (an integrated system for payments), SICOP (an integrated financial system used by State Secretariats), SIDEP (an integrated accounting system used for budgetary transactions), as well as an integrated accounting system used by Federal agencies that link monthly transactions to positions data. The authorities are contemplating a new project (possibly with World Bank support) to further integrate these accounting and financial systems, although information systems regarding state and municipal governments have not yet been part of those considerations. These sources provide information on the whole range of economic flows and

stocks. Specifically, public expenditure figures are obtained from the accounts payable certified as paid by the Treasury. This information is supplemented with information from other sources, primarily the Public Credit Unit.

Once Congress approves the Public Account prepared by the Unit of Government Accounting in April of the following year, it becomes the source of information for compilation of final fiscal statistics on the budgetary public sector. The Public Account shows only annual figures, but procedures are in place for benchmarking the corresponding monthly information. Specifically, the adjustments made to the Public Account in its review and audit processes are incorporated into the fiscal accounts in the corresponding month.

The main source of information for parastatal entities is the Integrated Information System for Government Revenues and Expenditure (SII), briefly described in section 0.1.2 above. Units of the federal government and parastatal entities send the required information using forms that are uploaded in the SII, which is responsible for distributing the information to the respective compilers.

Through this system, all parastatal entities submit every month most of the information necessary for compiling fiscal statistics. In addition, parastatal entities submit every month directly to the Public Credit Unit, comprehensive information on flows and stocks of domestic and external debt. Only Pemex, CFE, and development banks have debt (securities and loans).

The main source of information for the state and local (municipal) governments is the INEGI annual publication entitled "Estadísticas de Finanzas Públicas Estatales y Municipales de México" [State and Local Government Finance Statistics of Mexico]. The sources of information for this publication are: (a) for state governments, the administrative accounting records on the public accounts of each unit; and (b) for the municipalities, their accounting and financial records are collected through the local congresses. In addition, a questionnaire is used to obtain timely information on roughly 60 of the 300 most important municipalities that do not have administrative records with definitive figures. The collection method relies on transmission of information from congresses and other administrative units, which come in various forms and formats. No integrated or automated financial administrative system is used to collect these data.

The SHCP compiles and disseminates annual data on states—on operations and balance sheets—based on the information from the public accounts of the states 5-6 months after the presentation of the Public Account. There are plans to present quarterly information 30 days after the reference quarter based on the information that the states publish on their webpages in accordance with the Financial Discipline Law and the General Government Accounting Law. The Government Accounting Law mandates that national accounting standards follow the best international standards, apply to the three levels of government (federal, state, municipalities), and are fully aligned with the budget process. These records constitute the official source for all government statistics. The National Council for Accounting Harmonization (CONAC) was established to implement the law. In addition to these accounting standards, CONAC also mandates catalogs to standardize the coding of subnational budgetary revenue and expenditure and plans of accounts.

Similarly, under the CONAC General Accounting Law, Article 50, the SHCP has begun to collect quarterly information from states and municipalities. In principle, subnational governments are to publish information consistent with the catalogs on a quarterly basis with a lag of 30 days after the reference quarter. The information being collected is at a higher level of aggregation compared with the annual data and remains close to an accrual basis of recording. Standardized forms (in pdf or excel files) are collected and processed by SHCP (using manual, rather than automated, processes) and incorporated in quarterly general government statistics in a *GFSM 2014* presentation. General government data for the first quarter of 2021 and for the year 2020 were disseminated in June 2021.

While the SHCP and INEGI are working with all regional bodies to implement these accounting norms and catalog standards, this remains a work in progress. States and larger municipalities tend to align their practices with these norms and standards; however, less well-developed subnational governments face more challenges regarding their implementation. Training and assistance are being provided to support this alignment, and the work will involve strengthening understanding both by regional managers, as well as technical staff (especially on recording both cash and accrual information, double-entry accounting, and development and implementation of standardized electronic forms along with an associated integrated information system). The development of more systematized information flows for quarterly observations is envisaged.

For both the national and the international presentations of fiscal statistics, GFS codes have been linked to the chart of accounts through detailed bridge tables, which facilitates the compilation of government finance statistics from the underlying accounting information. The data collection programs are sufficiently open and flexible to provide for new developments in sources. The information necessary for compiling consolidated fiscal statistics for the various levels of government is available, except the municipalities. Moreover, fiscal statistics are normally presented on a consolidated basis.

3.1.2 Source Data Reasonably Approximate the Definitions, Scope, Classifications, Valuation, and Time of Recording Required

The budget classifications and the chart of accounts follow national criteria. However, through bridge tables, the classifications of the *GFSM 2014* are linked to those national concepts. This process has been automated for the most part. In general, the source data used to compile financial flows and stocks statistics for the general government and its subsectors are sufficiently detailed to allow classification and consolidation as outlined in *GFSM 2014*. CONAC issued for the three levels of government the chart of accounts, budget classifications, standards, and methodology to determine the time for recording income and expenses, the accounting manual, and the standards applicable to financial information and statements account.
https://www.conac.gob.mx/es/CONAC/Normatividad_Vigente.

The recording for government operations is on a modified cash basis (consistent with the *GFSM 1986*), although information on commitments, accrual, and payments are also available. In terms of valuation, historical values are followed instead of market prices.

Fiscal statistics are fully reconcilable with the budgetary data presented in the Public Account, in the official government accounts presented to Congress; the main difference is that for the Public Account, programmable expenditure is recorded on an exercised (sent to pay) basis, whereas in the fiscal statistics it is recorded on paid in cash basis.

3.1.3 Source Data are Timely

In the federal public sector, the accounting and administrative records provide comprehensive and up-to-date data. This is available 15 days after the end of the month for central government operations, 10 days for the operations of parastatal entities, and 21 days for the accounting trial balance.

As of this year, quarterly summary information will be available for the states between one and six months after the reference quarter and annually 5–6 months after the reference year. No annual, up-to-date information is available in a timely way for compilation of fiscal statistics on the state and local governments, and thereby general government. Nevertheless, relevant improvements have been developed in terms of timelines, by reducing the delay in annual data from states and municipalities from 12 to 9 months. Likewise, some improvements related to municipal governments have been developed, by prioritizing the collection and processing of information. INEGI disseminates statistics for the largest municipalities 195 days after the reference year, for 1,100 local governments that represent the 80 percent of the total income, 270 days after the reference year. In a third phase of dissemination (330 days after the reference year) another 600 municipalities are incorporated, which represent an additional 5 percent of total income. In the last update (515 days after the reference year) the remaining municipalities are incorporated in the statistics.

In general, data providers are made aware of the deadlines for the timely compilation of GFS, although many subnational governments have not submitted the information on a timely basis. As noted, the compiling agencies (SHCP and INEGI) follow-up to encourage improvements in the timeliness of the source data.

3.2 Assessment of Source Data

3.2.1 Source data—Including Censuses, Sample Surveys and Administrative Records—are Routinely Assessed, (e.g., for coverage, sample error, response error, and other nonsampling error) the Results of the Assessments are Monitored and Guide Statistical Processes

There are no significant problems in the coverage or integrity of statistical compilation. As pointed out above, fiscal statistics are compiled based on complete information. The main sources of information on the federal public sector are cross-checked with other accounting or administrative records that allow for verification of their accuracy. Similarly, differences are checked between transaction flows and changes in stocks. Preliminary fiscal statistics are compiled using the most up-to-date data that are appropriate for formulating and analyzing fiscal policy. All fiscal statistics are preliminary until the last revision is conducted with final, audited information. Pertinent tables are

labeled as preliminary. Moreover, source data are assessed by checking across different sources (mostly for accounts payable). If discrepancies are noted later, corrections are made as applicable.

To evaluate records provided by states, INEGI is implementing the Quality Evaluation Tool for Administrative Records (HECRA) to analyze the quality of source data to produce the EFIPEM report. INEGI plans to extend this exercise to municipalities, beginning with the largest local governments.

3.3 Statistical Techniques

3.3.1 Data Compilation Employs Sound Statistical Techniques to Deal with Data Sources

Fiscal statistics are based on complete information; as a result, procedures have not been established to allow for the estimation of omissions in the data. Even the data for fiscal statistics on the state and local governments are based on complete information for states, and 90 percent coverage of municipalities (by number of municipalities, higher as proportion of total revenue and expenditure). Consolidation of data for institutional aggregates follows international guidelines. Compilation procedures are fully documented and updated periodically.

3.3.2 Other Statistical Procedures (e.g., data adjustments and transformations, and statistical analysis) Employ Sound Statistical Techniques

Appropriate bridge tables facilitate adjustments to the source data. Detailed bridge tables are used to link the chart of accounts and detailed catalogs to the appropriate GFS classifications for both the national and international presentations of fiscal statistics. Central Government statistics adjustments and transformations are made using sound techniques. For example, central government debt is adjusted to market values, with securities holdings used to determine residency for external public debt statistics (i.e., domestic securities holdings by nonresidents).

3.4 Assessment and Validation of Intermediate Data and Statistical Outputs

3.4.1 Intermediate Results are Validated Against other Information Where Applicable

Information on revenue, expenditure, financing, and debt is routinely reconciled with the budgetary records of various SHCP departments, and with the bank balances of the entities in question.

3.4.2 Statistical Discrepancies in Intermediate Data are Assessed and Investigated

Significant statistical discrepancies in intermediate data are investigated, and the pertinent series are adjusted or corrected. These may be due to other economic flows and sectorization issues.

3.4.3 Statistical Discrepancies and Other Potential Indicators of Problems in Statistical Outputs are Investigated

For the national presentation of fiscal statistics, the official public balance is derived from the sources of financing, i.e., from changes in debt and in financial assets. Any statistical discrepancy

with revenue and expenditure is included as a separate item. Such statistical discrepancies mainly relate to time lags in recording and exchange rate differences and are generally small. Fiscal data discrepancies among compilers (ministries of finance, BM, statistical institutes, etc.) are compared and resolved or reconciled. Data on selected external public debt stocks and related flows are compared with creditor information.

For the international presentation of fiscal statistics, there are plans to review statistical discrepancies between operational flows and positions reflected in the corresponding balance sheets. Other significant statistical discrepancies are investigated, and the pertinent series are adjusted or corrected; these may be due to other economic flows and sectorization issues.

3.5 Revision Studies

3.5.1 Studies and Analyses of Revisions and/or Updates are Carried out and Used Internally to Inform Statistical Processes

The fiscal statistics are mainly based on administrative records. Monthly data are revised whenever corrections are made to the source data, which correspond to the month when the event occurred. The general government operations data disseminated in the context of the SDDS are final when released. Revisions incorporate all changes resulting from available up-to-date data. The characteristics, reasons, sense, and magnitude of changes in the source data that give rise to revisions are generally known and but not documented. Usually, revisions are small. Source data reliability is continuously assessed. Studies on revisions to fiscal statistics are carried out routinely and used to improve the quality of the statistics but are not disseminated. With the planned dissemination of quarterly general government operations and balance sheet statistics in the international presentation, revisions could become more frequent and significant, and revision studies may become more important.

4. Serviceability

4.1 Periodicity and Timeliness

4.1.1 Periodicity Follows Dissemination Standards

The authorities subscribed to the SDDS in 1996 and the country meets the SDDS periodicity requirements. According to the metadata on the IMF Data Standards Bulletin Board (DSBB), annual general government operations, monthly central government operations, and monthly central government debt data are disseminated on Mexico's National Summary Data Page (NSDP), a webpage hosted by the BM. However, annual general government operations are only disseminated in the IMF *Government Finance Statistics Yearbook* (*GFSY*), based on the international presentation.

Annual general government operations data are not disseminated on the NSDP; instead, monthly data are disseminated for the Central Nonfinancial Public Sector (*Sector Público Central No Financiero*), the traditional set of data used for fiscal policy analyses and decision-making. As noted,

this national concept covers the federal government plus social security, plus two nonfinancial public corporations (Pemex and CFE) and excludes state and local governments. These data can be found on the SHCP website.[3] The monthly central government operations data refer to the traditional coverage of the federal government plus social security (see section 2.2.1). The monthly central government debt statistics refer to the federal government only because social security funds are not permitted to contract debt under cash-based statistics (thus accounts payable are excluded). Like the broader public sector statistics, detailed monthly central government operations statistics and central government debt statistics can be found on the SHCP website.[4]

4.1.2 Timeliness Follows Dissemination Standards

Three sets of statistics are provided for the SDDS: 1) Central Non-financial Public Sector operations, which is a broad set of statistics used nationally for fiscal policy and analyses, instead of annual general government operations; 2) central government operations (covering the federal government and social security); and 3) central government debt (covering the federal government). All three sets are disseminated monthly within 30 days. Thus, the timeliness requirements of the SDDS, (within six months for annual general government operations, within one month for central government operations, and within one quarter for central government debt) are met or exceeded for two of the data categories. Nevertheless, Mexico has adopted a flexibility option for the timeliness of data on general government operations, in part because the annual statistics are available only 18 months after the end of the reference year. The data on general government operations released in June 2021 contained annual data for 2020 (excluding municipalities). Thus, once municipalities are included in these data on general government operations, dissemination could be within six months, as required under the SDDS without the need for a flexibility option.

4.2 Consistency

4.2.1 Statistics are Consistent Within the Dataset

Monthly statistics use the same concepts, definitions, and classifications in annual statistics. Also, the sum of monthly statistics equals quarterly and annual statistics.

National/Traditional Presentation of Fiscal Statistics

The various accounting identities (deficit/surplus = financing, principal components = sum of the components, functional expenditure = expenditure by economic type, domestic financing = change

[3] On the SHCP website: http://presto.hacienda.gob.mx/EstoporLayout/estadisticas.jsp, the "Reportes" tab leads to the "Ingreso, gasto, y financiamiento del sector público" tab and then the "Balance, Ahorro y Financimiento" tab. The "Balance del Sector Público" hyperlink leads to the aggregated data for the "Sector Publico Central No Financiero."

[4] On the SHCP website: http://presto.hacienda.gob.mx/EstoporLayout/estadisticas.jsp, the "Reportes" tab leads to the "Ingreso, gasto, y financiamiento del sector público" tab, and then the "Situación Financiera por Sector y Entidade" tab. The "Situación Financiera Gobierno Federal y Seguridad Social" hyperlink leads to the central government operations data. To find the central government debt statistics click on the "Rportes" tab, then the "Deuda Pública" tab., and then the "Deuda del Gobierno Federal" tab. The "Saldos de la Deuda del Gobierno Federal" hyperlink leads to the central government debt data.

in domestic debt, external financing = change in external debt, paid transfers = received transfers) are observed in the national presentation. A statistical discrepancy is labelled as part of "diferencias con fuentes de financiamiento" in the "Balance del Sector Publico" tables on the SHCP website (see footnote 3 in section 4.1.1). These statistical discrepancies are likely to be caused by differences in the time of recording and variation in exchange rates used in compilation

Vertical inconsistencies arise for the statistics on states and local governments. While INEGI compiles the data on revenue and expenditure, the SHCP compiles statistics on domestic financing and domestic (mainly central government guaranteed) debt (these entities have no external debt). The discrepancies that arise may be caused by problems with the coverage of instruments and/or by coverage of units (that is the lack of data from some municipalities). Moreover, no satisfactory checks can be made of transfers between state and local governments for resources classified as financing. The SHCP relies on the information provided by the central government regarding transfers to states and local governments as being relatively more robust. The SHCP plans to develop stronger source information to exploit accounting information system (on a cash and accrual basis) to contribute to resolving some of these discrepancies

International/GFSM 2014 Presentation of Fiscal Statistics

Statistics are vertically consistent (revenue minus expense minus the net acquisition of nonfinancial assets yields the same net lending/net borrowing as the net acquisition of financial assets minus liabilities). In addition, the statistics have small statistical discrepancies over time as a proportion of the value of transactions. In many cases these are explained by time of recording discrepancies that smooth out over time.

It is not clear that the statistics are horizontally consistent, in large part because the reconciliation is complex due to different institutional unit coverage and classification of instruments, especially for financial assets and liabilities. The authorities plan to work on horizontal consistency with the development of annual balance sheets and eventually the compilation of other economic flows.

4.2.2 Statistics are Consistent or Reconcilable Over a Reasonable Period of Time

Statistics are consistent with expected trends and reflect discretionary changes, external shocks, and economic activity. Time series are presented with the same methodology and coverage for adequate periods of time (with relatively strong consistency since 2000). Breaks in the time series and the reasons for them are clearly identified.

4.2.3 Statistics are Consistent or Reconcilable with Those Obtained Through Other Data Sources and/or Statistical Frameworks

There are no formal consistency checks or reconciliation tables between the fiscal statistics (national or international presentations) and other macroeconomic statistics. Under the Macroeconomic Statistics Technical Committee, the Public Finance Working Group plans to strengthen source data based on accounting information, revise the accounting standards and catalogs used by public

sector units (as well as to develop supplementary information), and to support the implementation of those standards and catalogs by government units.

Fiscal statistics are provided quarterly to INEGI to compile quarterly national accounts. INEGI uses this information for the federal government and collects the information for the rest of the general government sector directly. INEGI uses the Public Account as its source for annual national accounts, which is also the source for final fiscal statistics (usually revised in April of each year). Data compiled by the SHCP and INEGI contain differences due to the basis of recording (cash by the SHCP statistics versus accrual used by INEGI), which is the main reason for differences between the fiscal statistics and national accounts.

Similarly, there are no reconciliation tables or studies of differences between the fiscal statistics and external statistics (BOP/IIP/external debt). However, the SHCP furnishes (unpublished) detailed statistics to the BM for the compilation of external statistics. These data include information on stocks and flows of financial instruments by the public sector, with disaggregated details for the federal government and for Pemex, CFE and the Banca de Desarrollo shown separately (social security funds and state and local governments are not permitted to contract external debt). Since the BM is the government's agent for financial derivatives and other financial assets, it has ready access to the information needed for external sector statistics. For the data on government financing transactions with nonresidents, residence is determined by location of issue of the liabilities and not by residence of the creditor, and on public external debt as described in 2.3.1 above. The BM adjusts the SHCP data, with most differences between the fiscal and external sector statistics due to the basis of recording (cash in fiscal statistics and accrual in external sector statistics) and residency.

During the June 2021 Data ROSC, a reconciliation exercise was conducted, based on publicly available statistics on websites, to ascertain whether users might be able to perceive consistency across macroeconomic data sets. Regarding fiscal statistics the mission found discrepancies with the external sector statistics (BOP and IIP—on interest payments and net portfolio liability flows and stocks; and external debt statistics—on federal government gross external debt). These discrepancies are small in terms of percentage points of GDP (up to 0.3 percent of GDP but usually much less than 0.1 percent of GDP), but may be significant for a particular variable. Nevertheless, the mission found that it should be possible for the authorities to resolve/reconcile these discrepancies.

Banking sector transactions in fiscal statistics were found to be broadly consistent with monetary statistics during the 2010 Data ROSC and were not evaluated during this Data ROSC. However, no formal reconciliation table and explanation is prepared and published.

4.3 Revision Policy and Practice

4.3.1 Revisions and/or Updates Follow a Regular and Transparent Schedule

The information is preliminary and monthly data can be revised every month up to the publication of the Public Account. This information is audited and final and is usually available four months after the end of a year (by April each year). In practice, revisions follow a regular cycle and this revision

cycle is known by users. No documentation of the revisions is provided to users. The authorities recognize that revisions in the context of the international presentation are likely to become more important once quarterly general government operations and balance sheet statistics are published, and the schedule may need to be clarified, made transparent, and documented for users.

4.3.2 Preliminary and/or Revised/updated Data are Clearly Identified

Preliminary and revised data for monthly observations are not clearly indicated in statistical publications; however, there are broad announcements that sets of statistics for the latest year are preliminary and the metadata indicate that monthly observations are revised regularly until finalized (after the release of Federal Public Account information permits annual benchmarking, usually in April of each year). Revised data are disseminated in the same media and with the same level of detail as original data. There is sufficient consistency between the preliminary data and the final data, so preliminary data can be used confidently in policy formulation and analysis. For state and municipal governments, the status of the observations as preliminary, revised or final are provided in notes to all users on the INEGI website.

4.3.3 Studies and Analyses of Revisions are Made Public

Each year the SHCP prepares an internal document analyzing revisions; however, this document is not made public. For the most part, monthly revisions are small and mainly attributable to time of recording or exchange rate issues, although the annual benchmarking exercise based on the Federal Public Account release may involve somewhat larger revisions in particular months for a very small number of variables. The public is not provided with information on data revisions, and analyses comparing preliminary data with final data are not disseminated for major aggregates.

5. Accessibility

5.1 Data Accessibility

5.1.1 Statistics are Presented in a way that Facilitates Proper Interpretation and Meaningful Comparisons (layout and clarity of text, tables, and charts)

Overall, the presentation and navigation of fiscal statistics could be made more user-friendly. The statistics are presented on the SHCP website (http://presto.hacienda.gob.mx/EstoporLayout/guiaUsuario.jsp) with tabs for reports, press releases, an advanced release calendar, a users' guide, methodological notes, open data and an option to see the webpage in English or Spanish. However, navigating the web page and accessing the data could be made more intuitive (such as making better use of lateral hyperlinks, reorganizing some of the information, and providing detailed tables that follow the *GFSM 2014*).

National/Traditional Presentation of Fiscal Statistics

Fiscal statistics are used for budget preparation and monitoring, and in the formulation of economic and fiscal policies. The statistics are presented in a way that allows identification and comparison of the principal aggregates. Time series are also supplied. In general, a link can be made between the national classifications and those in the *GFSM 1986*, but in some cases, this requires access to detailed information that is not available to the public. International comparisons are not facilitated because the fiscal statistics on the SHCP website do not contain detailed tables in the *GFSM 1986* format with coverage that conforms with international standards. The SHCP website permits users to visualize the detailed time series in a table or graph.

International/GFSM 2014 Presentation of Fiscal Statistics

In recent years, the public has been provided with increasing amounts of information on government finance and public debt according to *GFSM 2014*. The recent presentation of annual statistics broadly follows the framework of the *GFSM 2014*. However, the lack of internationally standardized coverage and scope prevents users from easily understanding the data. Moreover, the presentation could be improved to facilitate its comprehension by domestic and international users. For example, the disaggregated *GFSM 2014* operating statements for revenue, expense, the net acquisition of nonfinancial assets and for financial assets and liabilities could be disseminated for the public sector, nonfinancial public sector, and general government. Charts and tables, along with commentary could be made available to users.

5.1.2 Dissemination Media and Format are Adequate

Monthly, quarterly, and annual fiscal statistics are posted on the SHCP website. Dissemination of recent fiscal statistics usually are accompanied with press releases. Fiscal statistics are open data and are disseminated in a way that facilitates access by users, and additional disaggregations and long time series are available. The website allows downloads of historical time series into Excel spreadsheets.

5.1.3 Statistics are Released on a Preannounced Schedule

A data release calendar is announced one year in advance on the SHCP website. The publication date can be adjusted one week in advance, but usually it coincides with the pre-announced date. In the case of the subnational governments, updates of information are established in the Release Calendar of the Statistical and Geographic Information generated by INEGI, which is public and disseminated up to one year in advance and is available in the INEGI website.

https://www.inegi.org.mx/app/saladeprensa/calendario/default.html

5.1.4 Statistics are Made Available to All Users at the Same Time

Fiscal statistics are released simultaneously to all parties through the SHCP website. Congress receives the statistics shortly (minutes) before their public release (see section 1.2.2). In addition, a

press release is published, usually from 2.30 p.m. on the appointed day, informing the public that the statistics are available. All users also have simultaneous access to the fiscal statistics for states and municipalities, which follows the INEGI advance release calendar.

5.1.5 Statistics not Routinely Disseminated are Made Available Upon Request

Non-published, non-confidential disaggregated data are supplied on request. To this end, users are provided, on the SHCP website, a telephone number, and e-mail address to make such requests.

5.2 Metadata Accessibility

5.2.1 Documentation on Concepts, Scope, Classifications, Basis of Recording, Data Sources, and Statistical Techniques is Available, and Differences from Internationally Accepted Standards, Guidelines, or Good Practices are Annotated

Six methodological notes with concepts, sources, and methods are posted on the SHCP website (in Spanish; only two are available in English). The Financial Requirements of the Public Sector describes how the PSBR concept is measured. Public Finances: Revenue, Expenditure, and Public Sector Financing (also available in English) describes how the national presentation of statistics are compiled, while the Public Debt document (also available in English) describes how public debt is compiled under the national presentation. The Real Growth Calculation note outlines how real growth is calculated in the traditional fiscal statistics. The website also contains a note on the collection of oil revenue under the Special Tax Law on Production and Services. Fiscal Balance in Mexico describes the international presentation of fiscal statistics. In addition, as Mexico is an SDDS subscriber, methodological notes are published on the IMF's Dissemination Standards Bulletin Board (DSBB) concerning central government and general government (Central Nonfinancial Public Sector) operations, as well as on central government debt. The documentation indicates some of the differences from internationally accepted standards. The SDDS metadata are updated regularly.

The SHCP plans to begin a review of its methodological notes to adapt them to recent changes. INEGI provides a brief methodological note on concept, metadata, and coverage matters of municipal statistics. In addition, a document containing detailed information on the compilation process for state and municipal statistics is published on the INEGI website.

5.2.2 Levels of Detail are Adapted to the Needs of the Intended Audience

General technical descriptions are published on the concepts, sources, and methods used. However, experts may need to seek further information to assess the attributes and shortcomings of the fiscal statistics (for instance, details on changes in coverage across the national presentation and across the international presentation; conceptual differences from international standards; reasons for any substantial revisions, or reconciliation with other macroeconomic datasets).

5.3 Assistance to Users

5.3.1 Contact Points are Publicized

A telephone number and e-mail address are posted on the SHCP website (at the bottom of each hyperlink to statistics) enabling users to contact staff that can be consulted regarding fiscal statistics. The staff provides support and advice to all users, regardless of their level of specialization, and can provide technical corrections on any incorrect use of the statistics. Contact information is also posted on the INEGI website regarding state and local government statistics.

5.3.2 Publications, Documents, and Other Services, Including Information on any Charges, are Widely Available

The fiscal statistics disseminated by SHCP and by INEGI are open and free to the public.

IMF Staff Recommendations

- Modify the compilation of annual fiscal statistics in the international presentation to conform more fully to the concepts and definitions in the GFSM 2014 (2.1.1)
- Compile and disseminate quarterly general government statistics, building on the statistics disseminated in June 2021, with a complete set of statements. This would help preparations to adhere to the SDDS Plus requirements. (2.1.1)
- Develop a *GFSM 2014* migration plan (including steps already envisaged) and consider adding target completion dates for the various steps. (2.1.1)
- Publish a table of all institutional units comprising the public sector and its subsectors and clearly group them according to: 1) the traditional coverage of units used in the national presentation of fiscal statistics; 2) the coverage used in the international presentation of fiscal statistics (highlighting any differences from international standards); and 3) the international standards by subsector of the public sector as described in the GFSM 2014. (2.2.1)
- Use the residency criterion to classify transactions and positions in financial instruments as domestic or external in collaboration with INEGI and the BM. (2.3.1)
- If foreign currency transactions cannot be converted into Mexican pesos at the mid-point exchange rate prevailing in the market on the day the transactions take place, use the period average exchange rate for the month when the transaction is recorded. Positions can continue to be converted using the end-of-period exchange rate. (2.4.1)
- Implement recording on a cash basis for the Statement on Sources and Uses of Cash and incorporate accrual or modified accrual in the other statements that follow the GFSM 2014. (2.4.2)

- Continue to implement harmonized accounting standards and related catalogs to facilitate the compilation of fiscal statistics according to the GFSM 2014. (3.1.1)
- Continue to improve the timeliness of data on state and municipal governments, including quarterly data within four months of the reference quarter. (3.1.3)
- To supplement information disseminated under the SDDS, consider adding data on the annual general government operations to the NSDP with timeliness of within six months, consistent with SDDS requirements. Based on data disseminated in June 2021 with this coverage and timeliness, this is feasible and would remove the need for an SDDS flexibility option. (4.1.2)
- For data on state and local governments, aim to reduce statistical discrepancy between operations (above-the-line) and financing. The reclassification of financing operations currently recorded as part of revenue and expenditure may contribute to resolving much of these discrepancies. (4.2.1)
- Develop and publish reconciliation tables between the fiscal statistics and other macroeconomic statistics, along with explanatory notes. Specifically, the reconciliation tables should describe how the fiscal statistics are used to derive the general government data as disseminated in the context of the quarterly national accounts, balance of payments, international investment position, external debt, as well as monetary and financial statistics. (4.2.1)
- Clearly indicate to users whether figures are revised, or final. (4.3.2)
- Publish revisions studies. (4.3.3)
- Strengthen the presentation and navigation on the SHCP website for fiscal statistics by providing users with detailed tables, time series and charting capabilities for coverage, instrument and transaction classifications, and presentation formats. For general government statistics, for example, detailed tables should include a: Statement of Sources and Uses of Cash; Statement of Operations; Statement of Other Economic Flows; and Balance Sheets, following the GFSM 2014. (5.1.1)

Table 2. Mexico: Data Quality Assessment Framework (June 2021): Summary of Results for Government Finance Statistics

(Compiling Agency: Secretariat of Finance and Public Credit)

Key to symbols: NA = Not Applicable; O = Observed; LO = Largely Observed; LNO = Largely Not Observed; NO = Not Observed; SDDS = Complies with SDDS Criteria[1]

Element	NA	Assessment				Comments
		O	LO	LNO	NO	
0. Prerequisites of quality						
0.1 Legal and institutional environment		X				
0.2 Resources		X				
0.3 Relevance		X				
0.4 Other quality management		X				
1. Assurances of integrity						
1.1 Professionalism		X				
1.2 Transparency		X				
1.3 Ethical standards		X				
2. Methodological soundness						
2.1 Concepts and definitions			X			The international presentation could follow the *GFSM 2014* more fully. There are no explicit plans to migrate to the *GFSM 2014*.
2.2 Scope			X			The detailed tables recommended by the *GFSM 2014* are not compiled. The data on general government disseminated in June 2021 does not include municipalities.
2.3 Classification/sectorization				X		A table showing the institutional units in the public sector and sectorization into subsectors corresponding are not published. International standards for sectorization, classifications, and residency are not applied fully.
2.4 Basis for recording			X			Market valuation, period average exchange rates for flows, and some international standards for basis of recording (such as accrual recording) are not applied.
3. Accuracy and reliability						
3.1 Source data		X				
3.2 Assessment of source data		X				
3.3 Statistical techniques		X				

[1]**Observed:** Current practices generally meet internationally accepted statistical standards without any significant deficiency. **Largely observed:** There are some departures, but these are not seen as sufficient to raise doubts about the broad observance of standards. **Largely not observed:** Current practices deviate significantly from standards, and major remedial action is required. **Not observed:** Most current practices deviate from standards. **Not applicable:** Used only exceptionally when standards do not apply to a country's circumstance.

Table 2. Mexico: Data Quality Assessment Framework (May 2012): Summary of Results for Government Finance Statistics (concluded)						
3.4 Assessment and validation of intermediate data and statistical outputs		X				
3.5 Revision studies		X				
4. Serviceability						
4.1 Periodicity and timeliness		X				
4.2 Consistency			X			The data on state and local government financing and debt are not fully consistent. Reconciliation tables across macroeconomic datasets are not published.
4.3 Revision policy and practice				X		A schedule of revisions and the revisions themselves are not made clear/available to users. Revision studies and explanations are not published.
5. Accessibility						
5.1 Data accessibility			X			The presentation and navigation on the SHCP website for fiscal statistics could be strengthened to enhance user friendliness.
5.2 Metadata accessibility		X				
5.3 Assistance to users		X				

BALANCE OF PAYMENTS, INTERNATIONAL INVESTMENT POSITION AND EXTERNAL DEBT STATISTICS

0. Prerequisites of Quality

0.1 Legal and Institutional Environment

0.1.1 The Responsibility for Collecting, Processing, and Disseminating the Statistics is Clearly Specified

The BM compiles and disseminates balance of payments, International Investment Position and gross external debt statistics.[5] The BM is an autonomous body which operates under the Banco de México Law of December 1993.[6] The Law does not specifically assign these functions to the BM. However, Article 62 Section I of the Law indicates that "The Banco de México shall be entitled, in conjunction with other competent authorities, to prepare, collect, and publish economic and financial statistics, operate information systems based thereon, and collect the data necessary for such purposes." Article 36 stipulates that financial corporations are obliged to provide the BM with the information it requires regarding their operations in order to fulfill its functions appropriately.

The Presidential Decree of December 31, 1952, amending Article 12 of the text of Mexico's agreement to join the International Monetary Fund (IMF), establishes that the BM is the sole agency with the faculty to send information to the IMF (including the balance of payments and IIP) and that agencies of the federal government, local governments, municipalities, private businesses and individuals are required to provide the BM with any data or information it may request in compliance with the above-referenced agreement. The Decree establishes sanctions for submitting incomplete or inaccurate data or reports, but the amounts of these sanctions have not been revised. In practical terms while BM is entitled to collect information from the nonfinancial sector, it cannot impose sanctions in cases of noncompliance.

As a compiler of statistics, the BM forms part of the National System of Statistical and Geographic Information (SNIEG). The SNIEG was defined and regulated by the Law of the National System of Statistical and Geographical Information (LSNIEG) of April 2008,[7] also known as the Statistical Law. The Law covers all data producing organizations that have been granted autonomy by the Constitution and the BM is granted authority to collect and compile macroeconomic statistics under

[5] The BM compiles and disseminates other external sector statistics: the Template on International Reserves and Foreign Currency Liquidity, Coordinated Portfolio Direct Investment Survey, Coordinated Portfolio Investment Survey, Merchandise Trade Statistics, and International Remittances.

[6] https://www.banxico.org.mx/marco-normativo/marco-juridico/ley-del-banco-de-mexico/%7B65E243F0-4E89-DE55-74AC-7AA890B13379%7D.pdf.

[7] https://www.snieg.mx/contenidos/espanol/normatividad/marcojuridico/LSNIEG.pdf.

the LSNIEG. However, the balance of payments, the IIP and the external debt statistics have not been identified as statistics of national interest or explicitly mentioned in the Law. The BM participates in the Executive Committee of the Economic Information Subsystem of the SNIEG and in several of its Specialized Technical Committees: Tourism, Macroeconomic Statistics and National Accounts and External Trade, among others. In 2012, BM issued a Circular addressed to financial institutions and money transfer entities for the provision of information on workers' remittances.

According to the Article 27 of the Federal Law of Public Debt,[8] the Secretaría de Hacieda y Crédito Público t (SHCP) has the responsibility to publish periodically the public debt statistics, including public sector external debt. External Debt Statistics (EDS) are disseminated by the BM as a service to the public and to comply with the requirements of the Special Data Dissemination Standards (SDDS). EDS compilation is based on datasets provided by the SHCP or available at the BM and does not require the collection of specific information.

0.1.2 Data Sharing and Coordination Among Data-producing Agencies are Adequate

The BM has established institutional procedures for the exchange of information with other agencies in the public sector and with private entities for the compilation, validation, reconciliation, and dissemination of the balance of payments, the IIP and the external debt statistics. These procedures include both formal (namely the SNIEG Technical Committees) and informal arrangements.

An institutional agreement with the Secretariat of Economy (SE) in the area of foreign direct investment guarantees coordination and information sharing. The collection and compilation of external merchandise trade are coordinated by the Technical Committee on External Trade Statistics comprising the BM, INEGI, the SE, and the Customs General Administration (AGA). The BM is responsible for preparing and disseminating the trade balance and trade statistics based on customs information provided by AGA. The compilation of goods in the Goods and Services account of the balance of payments is based on the same information, thus guaranteeing consistency. The Technical Committee coordinates the methodological and operative aspects of this process.

A Technical Committee coordinates the compilation of Travel statistics which have been transferred since 2018 to INEGI under a bilateral agreement with the BM. Travel credits and debits combine an estimate on traveler's expenditure, compiled through a survey to international travelers conducted by INEGI and monthly information on the number of international travelers provided by the National Migration Institute.

In cases where no formal committees are stablished, the BM holds periodic meetings with the public sector or private agencies that provide information needed to compile the ESS, to coordinate the information requirements and avoid the duplication of efforts. Among others:

- The SHCP provides the BM with basic information for the compilation of external debt of the public sector (Federal Government and public corporations). This is complemented with

[8] http://www.diputados.gob.mx/LeyesBiblio/pdf/136_300118.pdf.

information from other sources (mainly other areas of the BM) to comply with the residency criteria for external debt.

- Indeval (the central depository of securities in Mexico) provides information on transactions and positions of nonresident investors in securities traded in the national exchanges. This information is essential for the compilation of Portfolio Investment and EDS.
- The National Banking and Securities Commission provides the BM with data pertaining to the financial assets and liabilities of financial institutions.
- The National Insurance and Surety Commission facilitates information on insurance services acquired or provided by insurance corporations.
- The National Council of Science and Technology (CONACYT) provides information on international trade in services and the capital account.

When the exchange of information includes confidential data, it is governed by memorandums of understanding or other legal agreements. The establishment of standard and streamlined processes, procedures, or protocols for sharing confidential data among the organizations responsible for the collection, compilation and dissemination of statistics facilitate these exchanges avoiding the need for new exchanges that might become necessary case by case.

Suitable mechanisms have also been put in place for obtaining data from other departments or areas of the BM, such as the Directorate General of Central Bank Operations, the Directorate General of Financial System Issues, the Directorate General of Administration or Directorate of Accounting, Planning and Budgeting, and the Directorate of Macroeconomic Analysis.

0.1.3 Individual Reporters' Data are Kept Confidential and Used for Statistical Purposes Only

Confidentiality of reported data and limiting use to statistical purposes are adequately guaranteed by current legislation. In the surveys and other statistical inquiries, respondents are informed of their rights and obligations regarding the provision of information. The note that accompanies the survey forms refers to the confidentiality of the information and that it will only be used for statistical purposes and disseminated in an aggregate manner.

As a member of the SNIEG, the BM must comply with Articles 37 and 38 of the Law of the National System of Statistical and Geographical Information. According to these, the data provided for statistical purposes by informants (that is, individuals and legal entities, from whom statistical and geographical data are requested in terms of the Law) to the units (that is, the administrative areas with the responsibility to develop statistical and geographic activities or that have administrative records that allow obtaining Information of National Interest from autonomous constitutional bodies, among which is included BM, as provided in article 2, section XV, subsection d, of the same Law) will be strictly confidential and under no circumstances may be used for any other than statistical purposes. The Law also states that those data that come from administrative records will be managed observing the principles of confidentiality and reserve, to avoid disclosure in any case in a nominative or individualized way, and/or before judicial or administrative authority—including prosecutors, in or out of court.

With regard to the management of primary and intermediate data, Section VIII of Article 24, of the General Conditions of Employment of the BM,[9] establishes that "workers are required to act with discretion in discharging their duties, observing the strictest confidentiality with regard to the Bank's business. They shall refrain from disclosing in writing or orally to outsiders the events, dealings, data, analyses, studies, expert opinions, documents, and any other information known or made available to them in the course of their work at the Bank. Failure to comply with the provisions of this section shall be considered serious misconduct and shall result in termination of appointment, without the Bank incurring any liability."

Confidentiality also is protected through computer permissions to access confidential information. Access to individual data is restricted to staff of the External Sector Analysis Subdivision (SASE) who require such information for the compilation of the ESS. Measures related to data processing and consultation mechanisms have been taken to protect the information on individual companies.

Some individual information is made available to members of the Board of Governors during the meetings where balance of payments trends are presented. This information is provided verbally to explain breaks in the series, or revisions of relevant magnitude. However, such information must remain confidential as Article 43, Section V of Banco de México Law explicitly establishes that members of the Board of Governors are required to protect the confidentiality of the individual information provided by natural and legal persons. Additionally, Article 45 states that information disclosed in the Board of Governors meetings cannot be disseminated by any person attending those meetings without an explicit authorization by the Board.

The BM has established various operating manuals that set procedures and processes that must be carried out with the information received to compile the statistics. These manuals take account of the need to safeguard the confidentiality of statistical information and prevent the use of the information collected for statistical compilation for other purposes. Statistical tables and reports on balance of payments, the IIP and external debt statistics are prepared in a manner that prevents the disclosure of individual data. The BM does not disseminate data for a particular item if the number of resident institutions in the item is less than three.

0.1.4 Statistical Reporting is Ensured Through Legal Mandate and/or Measures to Encourage Response

The Presidential Decree of December 31, 1952, amending Article 12 of the text of Mexico's agreement to join the IMF, establishes that agencies of the federal government, local governments, municipalities, and individual businesses and persons are required to provide the BM with any data or information it may request in compliance with the above-referenced agreement. The Decree establishes economic sanctions for the submission of incomplete or inaccurate data or reports, the application of these sanctions has not yet been needed.

[9] http://transparencia.banxico.org.mx/documentos/%7B69EE781E-ECD6-2233-59B3-AA99044DFDE9%7D.pdf.

Under articles 24, 35 Bis and 36 of the Banco de México Law, financial institutions are obliged to report to the BM any data on their operations, and penalties may be applied for noncompliance. There is continuous communication between the BM and reporting entities to solve noncompliance problems and the BM provides adequate support for the preparation of information/reports.

The BM has ensured cooperation with public entities that have under their custody administrative records that serve as a fundamental input for the generation of statistics. This cooperation is coordinated in the Technical Committees and working groups of the SNIEG. This is the case of INEGI, the SE, the SHCP and the Customs General Administration (AGA). The BM maintains fruitful cooperation under nonformal agreements with other public and private institutions that provide access to their administrative records, such as Indeval, the National Banking and Securities Commission, the National Insurance and Surety Commission, and PEMEX, among others.

While the BM is entitled to request the reporting of information by the nonfinancial private sector companies and individuals for compiling the ESS, it is not able to impose sanctions on those who do not provide the requested information on a timely basis or provide inaccurate data. The BM staff have established procedures to encourage voluntary reporting. For example, in the letter that accompanies surveys the BM explains to respondents the importance of the information requested for compiling the ESS, that the data can only be used for statistical purposes, and that it cannot be shared, and asks for their cooperation in providing the information. BM staff visit companies to provide support to prepare the required information. An e-mail address and a contact person who can answer questions is provided, noting that BM staff can give assistance over the telephone in filling out the form. As a result of these measures, as well as the long tradition of the BM as a compiler of the ESS, the response rate to surveys or data requests by the non-financial private sector is relatively high. For example, in the survey on direct investment, financial assets and international trade in services, information is received from around 1,100 companies, out of around 1,400 surveyed companies. Although reporting by major companies is good in most cases, there are delays in reporting leading to statistical revisions, and in some cases small companies do not report.

To encourage respondents to cooperate, the BM participates, at the request of interested parties, in seminars with private sector organizations and sends aggregate statistical information to companies that provide the BM with data for balance of payments compilation purposes.

In 2012, the BM issued a circular[10] addressed to financial institutions and money transfer entities requesting the provision of information on workers' remittances. This circular establishes the obligation for firms involved in the business of personal money transfers to submit a set of monthly reports for the compilation of data on remittances in the secondary income account of the balance of payments. Although it is not explicit, sanctions applicable to financial institutions may be imposed for nonreporting or providing the wrong information under the general regime of the Banco de México Law (article 36 bis). The degree of compliance is high.

[10] https://www.banxico.org.mx/marco-normativo/normativa-emitida-por-el-banco-de-mexico/circular-12-2012/%7BCFCD91DA-B891-6067-0D78-2790A396D9D1%7D.pdf.

There is a need to reinforce the authority of the BM to collect statistical information from the nonfinancial private sector. This would require a legal framework that clearly establishes the mandatory reporting of data to the BM for the compilation of ESS, or joint INEGI-BM procedures to conduct surveys under the authority of the Statistical Law.

0.2 Resources

0.2.1 Staff, Facilities, Computing Resources, and Financing are Commensurate with Statistical Programs

Financial, computing, and staff resources are generally sufficient to compile the balance of payments, the IIP and the external debt statistics. ESS are compiled in two different units: the Real Sector Analysis and Measurement Division (GAMSR) and the Public Finance Analysis Division (GAFP), both under the Directorate General of Economic Research. Additionally, the Financial Programming Division is responsible for the compilation and dissemination of the External Reserves and Foreign Liquidity Template.

The GAMSR is responsible for the compilation and dissemination of the balance of payments, the IIP and the CDIS and CPIS. For this task, the GAMSR has 20 full time BM professionals that, apart from compiling statistics, perform analytical and administrative tasks. Additionally, 11 students assist with specific tasks related to the three surveys, under the social service program.[11] The number of full-time employees has increased recently from 17. Additionally, the transfer to INEGI of the Travel survey has released resources that have been reallocated to other statistical and analytical tasks. In recent years and in collaboration with the technology area of the BM, the GAMSR has carried out intense work to automate collection and compilation processes, which also has increased efficiency.

The GAFP is responsible for compiling, disseminating and analyzing EDS. Five of its full-time staff are dedicated to these tasks. The compilation of EDS by the BM is based on information compiled by the SHCP or by other BM areas and departments, and the GAFP does not need to collect basic information from surveys or other administrative sources.

Both the GAMSR and the GAFP have adequate computing resources to compile and disseminate the statistics and every effort is made to use the most advanced information technology available for data processing and dissemination. Each staff member has a modern individual computer with Internet access and appropriate software. In the tasks of collecting and editing information, validating intermediate outputs, and compiling, disseminating and analyzing the ESS, the BM uses a set of databases, software programs and ad-hoc systems developed by the technology area. Among others, there are systems in Oracle for compiling merchandise trade and direct investment in Mexico (inward direct investment), a system in Java for storing and compiling information on remittances, and technical ad-hoc solutions for sending and collecting information through surveys: forms in

[11] The social service is mandatory in the Mexican education system for students enrolled in higher education.

Excel for the collection of information and interfaces developed with PYTHON and Stata to upload and process the information.

During the recent COVID-19 pandemic, BM has continued statistical production and dissemination work without experiencing dysfunctions.

Qualifications and training of the staff are adequate, and staff motivation seems high. The staff has sound knowledge of and familiarity with the concepts and methodology recommended in the BPM6 and related guidelines. Staff engaged in the compilation of ESS participate in courses and seminars on methodology and compilation organized by the IMF and CEMLA, among others.

0.2.2 Measures to Ensure Efficient Use of Resources are Implemented

The BM has established procedures for auditing internal processes. In recent years, these procedures have been applied to the compilation of specific items of the ESS: travel, remittances and liabilities in other investment. Additionally, operation manuals for the different statistical processes are issued to guide documenting and verifying efficiency of the processes. Finally, when new surveys or questionnaires are needed, these are prepared together with the area specialized in statistical methods to determine the sample of the survey and the design of the questionnaires. Continuous efforts are made to use the most advanced information technology and procedures.

0.3 Relevance

0.3.1 The Relevance and Practical Utility of Existing Statistics in Meeting Users' Needs are Monitored

A structured and periodic process of consultation with users has not been yet established. The General Law on Transparency and Access to Public Information[12] (known as the Transparency Law) entitles users to request statistical information and to ask questions on statistical procedures. While the law enables users to express their needs, this avenue has been used mainly to request statistical information or methodological explanations. Both GAMSR and GAFP keep records on user questions and expression of interest in new data with the aim of improving statistical products. Also, the BM obtains feedback from users through the Transparency Unit of the BM and official requests from various institutions.

0.1 Other Quality Management

0.1.1 Processes are in Place to Focus on Quality

The BM has established a quality assurance procedure (under the ISO 9001:2000 Quality Certification). Staff is aware of the importance of quality, and of finding ways to improve quality.

[12] http://www.diputados.gob.mx/LeyesBiblio/pdf/LGTAIP_200521.pdf.

In recent years, the quality of two items of the balance of payments (remittances and liabilities in other investment) have been audited with positive results. The suggestions received from these audits have led revisions in the processes for the generation of the statistics that have enhanced the quality of the statistics. The participation of BM in technical committees and working groups in the context of the SNIEG contribute to a focus on enhancing the quality of the ESS. Moreover, quality is monitored by intra-institutional working groups that monitor and analyze the ESS.

0.1.2 Processes are in Place to Monitor the Quality of the Statistical Program

Mechanisms are in place for assessing the quality of the compilation and dissemination of the balance of payments, the IIP and the external debt statistics. These include ongoing quality assessment of the primary sources (surveys, administrative information and data provided by other areas of the BM). Also, processes are automated for cross-checking and comparison of source information with other statistical series available elsewhere at the BM. This enables verification of consistency within the data series underpinning the ESS. In addition, the BM assesses on an ongoing basis the functionality of the systems for data entry, processing, and dissemination.

0.1.3 Processes are in Place to Deal with Quality Considerations in Planning the Statistical Program

The BM is responsible for methodological knowledge on ESS, the development of a general framework, the coherence and the standardization of the statistical processes and the implementation of the frameworks for general statistical methods, quality assurance and process development. Although there are no explicit processes focused on quality, the BM evaluates work programs to identify deficiencies and ascertain any need to improve data quality. A plan for the revision of the ESS was recently developed and includes the objective of increasing the quality of the information sources and the compilation processes, especially in those areas in which significant deficiencies had been detected by IMF technical assistance missions. Most of the recommendations proposed by these missions have been implemented.

1. Assurance of Integrity

1.1 Institutional Integrity

1.1.1 Statistics are Produced on an Impartial Basis

The Constitution of the United Mexican States granted autonomy to the BM, substantiated by the enactment of its Law on April 1, 1994. The legal framework governing the BM ensures the autonomy and professional competence of staff members assigned to the compilation of statistics. The staff is integrated by full-time employees with no formal relationship with any other entity, agency or company that are sources or users of the information generated. Professionalism is encouraged, as indicated in the articles on the rights and duties of employees in Chapter IV on the General Conditions of Employment of the BM. The appointment and terms of employment for staff involved in the production of the ESS are based on technical criteria only. The staff has a significant degree of

autonomy in their work and are generally guided by international standards in compiling balance of payments, IIP and external debt statistics. The assignment of tasks in the area of data compilation is based solely on technical and professional criteria.

The BM promotes staff training through participation in training organized by international institutions in the country or overseas, such as the IMF and CEMLA. Both GAMSR and GAFP are under the Directorate General of Economic Research. This facilitates a very productive close collaboration between compilers and analysts, which fosters effectiveness in both activities.

1.1.2 Choices of Data Sources and Statistical Techniques as well as Decisions About Dissemination are Informed Solely by Statistical Considerations

The choices of source data and methodologies for compiling the ESS are based on statistical considerations only, taking account of the timeliness and quality of alternative sources. The surveys and administrative sources are selected and designed based on their role in specific economic phenomena that are relevant for measuring the balance of payments, IIP and external debt, taking account of international methodological standards and sound quantitative methods. The criteria for introducing new data collection and compilation methods are aimed at improving the quality of the information available and broadening the coverage of the ESS.

The BM staff is independent to select data sources (for example, administrative records or surveys). There is no interference from other agencies in the choice of data sources and compilation methods which are based on the analysis of the quality, availability, opportunity and cost of the different data sources, the data needs, and the objective of meeting international standards. The timing, methods and other aspects of dissemination of the ESS are based solely on statistical considerations without interference from government agencies. Users are informed of the dissemination dates of the main statistics through the Advance Release Calendar.[13] The calendar includes the dates for the dissemination of the balance of payments but does not specify the dates for the dissemination of the IIP, and the external debt.

The balance of payments information is an input to the database on economic variables that is accessible to the public at INEGI, with the BM clearly identified as the source. The dissemination by the BM of the balance of payments, the IIP, the external debt statistics and other ESS (monthly international trade in goods or quarterly FDI statistics, for example) is coordinated with the dissemination of other related statistics by INEGI, the SHCP and the SE. Among others, INEGI disseminates the balance of trade data monthly, travel statistics and the rest of the world account as part of the quarterly sectoral accounts; the SHCP disseminates public debt statistics (which includes public external debt); and the SE disseminates foreign direct investment statistics.

[13] https://www.banxico.org.mx/viewers2/JSP/calendarioDifusion_es.jsp.

1.1.3 The Appropriate Statistical Entity is Entitled to Comment on Erroneous Interpretation and Misuse of Statistics

The BM seeks to avoid misinterpretation or misuse of statistics by providing explanatory materials and information sessions, press releases, and comments on the trends and behavior of the data. Press releases on the balance of payments highlight the principal quarterly balance of payments trends with objectivity and independence. The evolution of the foreign sector is analyzed within the context of the economy. Methodological notes posted on the BM website and in the National Summary Data Page (NSDP) facilitate understanding of the statistics. There is no formal policy or a well-established practice of dealing with misinterpretations of data or misuse of the statistics. However, when serious interpretation errors are detected, the authorities respond by clarifying or confirming the statistical results.

1.2 Transparency

1.2.1 The Terms and Conditions Under which Statistics are Collected, Processed, and Disseminated are Available to the Public

The terms and conditions under which the ESS are compiled and disseminated are usually made available to reporting entities. However, these terms and conditions are not made explicitly available to the public. Metadata providing information on each statistic can be found on the website of the BM, but only including a brief methodological reference describing the content of each heading in terms of the BPM6. The names of the contact persons that may provide additional information on the balance of payments, IIP and external debt statistics are also published. The Banco de México Law and related legal norms are published on the BM website. An unofficial English translation is also available. The LSNIEG[14] is published on the INEGI website as well as the SNIEG and the Chamber of Deputies' websites. Under the Law of Transparency and Access to Public Information, users may contact the areas of the BM responsible for the ESS. The BM has established in its website a general window for user consultations and requests. The area responsible for compliance, channels the consultations and requests to the specific area responsible for the relevant subject.

1.2.2 Internal Governmental Access to Statistics Prior to Their Release is Publicly Identified

There is no internal government-wide access to the balance of payments, the IIP and the EDS prior to their official release. The BM's Board of Governors has access to the balance of payments one day before public release. No other public agencies have prior access to any ESS, except for the agencies that participate in the collection and compilation of statistics in the framework of inter-institutional committees and working groups. In the case of the merchandise trade, the BM receives the administrative records from the AGA, processes and compiles the aggregates, and shares the monthly statistics with the other members of the committee (INEGI, AGA and SE). Prior access to these statistics (two days before the dissemination on the website of the BM) is granted only to the

[14] https://www.snieg.mx/contenidos/espanol/normatividad/marcojuridico/LSNIEG.pdf.

INEGI, not to AGA or SE. In the same context, the SHCP has prior access to the public sector external debt, and the SE to foreign direct investment statistics.

1.2.3 Products of Statistical Agencies/units are Clearly Identified as such

The BM is clearly identified as the agency responsible for compiling and disseminating ESS. The name and logo of the BM appear on press releases concerning balance of payments. The statistical tables are only disseminated on the BM's website and in its reports. The release of the IIP and external debt statistics do not include an official commentary or analysis, with dissemination through the BM's website. Any official government report that includes balance of payments information references the BM as the data source. Statistics that are compiled as a joint effort in the framework of inter-institutional committees and working groups (International Merchandise Trade, Tourism, Foreign Direct Investment in Mexico, Public Debt) are also disseminated by the relevant agencies in a coordinated manner with the dissemination of the ESS by the BM.

1.2.4 Advance Notice is Given of Major Changes in Methodology, Source Data, and Statistical Techniques

Users are notified of changes in methodology or in data sources. The BM does not have a policy that establishes a fixed calendar to introduce methodological changes and revisions in the ESS. Since the introduction of the BPM6 guidelines, in 2017, relevant changes in methodology or in presentation are notified in advance to users. Additionally, whenever methodological changes are made in the balance of payments, these are announced at the time the data are disseminated in the quarterly press release. In the case of the IIP, an announcement is displayed on the IIP section of the website, and a press notice is disseminated on the website in the case of major changes in the methods and sources used to compile the external debt statistics.

The last major methodological change in the ESS was the introduction on the BPM6 in 2017. At that time, users were notified in advance; and a methodological note on the implementation of the new methodology and related improvements in the compilation of the statistics, as well as metadata, was posted on the BM's website. Several meetings were held with the press and selected users to raise awareness of the new structure of the balance of payments, the strategy of dissemination of the new data series, and the main methodological changes. The new methodology and improvements in the measurement of the IIP were also announced on the website.

1.3 Ethical Standards

1.3.1 Guidelines for Staff Behavior are in Place and are Well Known to the Staff

The Banco de México Law states that BM staff members are subject to the provisions of the Federal Law on the Administrative Responsibilities of Civil Servants that specifies clear rules for governmental agencies. In addition, Chapter IV of the General Conditions of Employment of the BM establishes clear ethical standards that apply to all the employees. The General Conditions of Employment of the BM are disseminated on its internal website and made known to all new

employees. The general Code of Ethics of Banco de México,[15] introduced in January 2019, establishes the ethical standards that all its employees must observe. These principles cover legality, honesty, loyalty, impartiality, efficiency, austerity, discipline, professionalism, objectivity, transparency, accountability, merit competition, effectiveness, integrity and justice. The good reputation of the employees of the BM and the Bank's long-standing independence from other public entities serve to protect the BM from political interference. While there are no specific written ethical standards applicable to the staff involved in producing balance of payments, IPP and external debt statistics, as employees of the BM, they are subject to the rules and laws of the institution and to those that apply to public servants.

2. Methodological soundness

2.1 Concepts and Definitions

2.1.1 The Overall Structure in Terms of Concepts and Definitions Follows Internationally Accepted Standards, Guidelines, or Good Practices

The balance of payments and the IIP are compiled and disseminated[16] on the basis of the criteria set forth in the *BPM6*. Consistent data series are disseminated since 2006. The distinction between current, capital, and financial accounts, the classification of transactions by item in the current and capital accounts, and by functional categories in the financial account and in the IIP follow the guidelines of the *BPM6*. The BM also maintains a BOP time-series compiled according to the *Balance of Payments Manual, fifth edition* (*BPM5*).

The concept of residence is applied in conformity with the *BPM6*, and transactions and positions are defined as those between resident and nonresident units. When the basic sources used for data compilation do not follow these criteria, adjustments are introduced. For example, financial transactions and positions between branches of Mexican banks abroad and resident units are reported in some basic sources (for example, by the SHCP on the liabilities of the public sector) following the nationality concept. In this case, these branches are considered resident and liabilities of Mexican residents against them are considered domestic liabilities. The adjustment made involves reclassifying these transactions and positions using the residency criterion. The adjustment is made with information on the assets and liabilities of the branches of the Mexican deposit taking corporations, which is provided by other BM areas. Also, some transactions and positions in debt securities are reported following the place of issue criteria (securities issued domestically or abroad) rather than the residency criteria. Also, in this case, adjustments to comply, as far as possible, with the residency criteria, are introduced in the balance of payments, IIP and external debt statistics. For this adjustment, the BM uses information provided by institutions involved in the custody of securities and the positions in securities issued abroad by resident units that are held by resident

[15] https://www.banxico.org.mx/conociendo-banxico/d/%7B67F9B0DB-52F5-6638-A596-00DF8433C386%7D.pdf.

[16] https://www.banxico.org.mx/SieInternet/consultarDirectorioInternetAction.do?sector=1&accion=consultarDirectorioCuadros&locale=es.

financial institutions. These sources of information allow identification of nonresident's holdings of Mexican peso-denominated debt instruments issued by the Federal Government, the Institute for the Protection of Banking Savings (IPAB) and the BM, and holdings by residents of foreign currency denominated debt instruments issued by the Federal Government. In general, the classification of financial transactions and positions by maturity follows the remaining maturity criteria. Only some of the other liabilities of the nonfinancial private sector follow the remaining maturity criteria.

External debt statistics are compiled following, in general, the criteria of the 2003 edition of the External Debt Statistics (EDS) Guide. For this reason, gross external debt positions disseminated on the BM website deviate in methodology and presentation from the BPM6 and the 2013 EDS Guide, and are not fully consistent with the debt liabilities in the IIP. The GAFP compiles external debt on the basis of two sources: information provided by the SHCP, which is in charge of data on public debt, and information provided by other areas and departments of the BM. In principle, data sources and compilation are consistent with those of the financial account of the balance of payments and the IIP. Nevertheless, classification and sectorization follow different criteria from the IIP. Additionally, the allocation of SDRs and the external liabilities between companies in a direct investment relation are not included in external debt.

2.2 Scope

2.2.1 The Scope is Broadly Consistent with Internationally Accepted Standards, Guidelines, or Good Practices

The balance of payments, the IIP and the EDS include the transactions and financial positions of institutional units resident in Mexico with the rest of the world. The residence criterion is applied following the principles established in the *BPM6*. External transactions and positions in debt securities issued by public and private nonfinancial units are reported in the primary sources following the criterion of the place of issue (i.e., securities issued in the Mexican or foreign markets) not the residence criteria. However, adjustments are made to include nonresident transactions and positions in debt securities issued in Mexico as external liabilities and to deduct, from the total debt securities issued in foreign markets, resident transactions and positions in these securities. These adjustments are limited by the information available (information provided by Indeval and by the Monetary Statistics).

The recording of goods for processing was discontinued in 2006, following the elimination of the Maquila Program. Under the new program (IMMEX), companies are not obliged to distinguish whether they own their inputs or not. When requested to report manufacturing services, the companies noted that because the tax authorities no longer require the information, they stopped differentiating between manufacturing on their own account and manufacturing for nonresident clients. Exports of manufacturing services are now recorded as exports of goods.

The GAMSR is seeking support from the tax authorities to collect information for compiling data on digital services acquired from nonresidents by resident households. These transactions, that had been increasing in recent years, are not measured by the BM, and have expanded due during the

pandemic. A plan to compile these services—in the framework of the SNIEG committees and working groups—would need to give the BM access to fiscal data on digital services, credit/debit card transactions, and any other information required to produce an accurate estimate.

There are no estimates for contraband and other illegal activities. Undervaluation of imports and overvaluation of exports are subject to a detection procedure conducted every month at a transactional level. This procedure serves to identify errors in the reporting of both value and volume. The tax authorities provide information in both US dollars and pesos, allowing to detect and correct exchange rate inconsistencies. Estimates are made with regard to some agricultural exports, and the information on crude oil exports from administrative records is replaced by the information provided by P.M.I. Comercio Internacional, the entity responsible for operating in international crude oil markets.

The coverage of services has been expanded in recent years thanks to a survey carried out by the GAMSR, but the information disseminated on the BM website does not include the full detail available. However, the detailed information is reported to the IMF for re-dissemination.

The external debt information disseminated by the BM does not include the intercompany debt liabilities of resident corporations against nonresidents in the context of a direct investment relationship.

2.3 Classification/Sectorization

2.3.1 Classification/Sectorization Systems Used are Broadly Consistent with Internationally Accepted Standards, Guidelines, or Good Practices

Classification and sectorization of the balance of payments and the IIP, in general, follows the guidelines of the *BPM6*. However, cross-country comparability of data is hindered by the use of national classifications and presentations rather than the standard classification of *BPM6*. The classification of transactions and positions by item and institutional sector in the national presentations of the balance of payments and the IIP include a limited degree of detail in the current account and differ in the financial account and the IIP relative to the standard components of the *BPM6*. In the current account, non-monetary gold is not identified as part of the goods account, and the detail of services is limited to the main concepts (transport, travel, insurance, financial services and others). In the financial account and the IIP classification by instrument is also limited in the other investment and reserve assets. The BM provides the IMF with data on the balance of payments and IIP that closely follows the classification and sectorization recommended in the *BPM6* and a higher degree of detail in the current account. The more detailed information is reported to the IMF for re-dissemination. Tables that reconcile the balance of payments published at the national level with the information reported to the IMF for re-dissemination are not available.

While the sources of information for the compilation of the financial account and the IIP are basically the same, classification and sectorization of external debt follow the methodology of the 2003 edition of the EDS Guide. The classification and sectorization of external debt takes account of

the need to show consistency with the official public external debt data disseminated by the SHCP. In the external debt statistics, units are classified in the following sectors and their debt liabilities are recorded as follows:

Federal Government. The external debt of the Federal Government sector does not include the external debt of subnational government units and decentralized agencies. The main difference with the IIP is due to the non-inclusion in the external debt of the liabilities arising from debt securities issued domestically by subnational governments that are held by nonresidents. These liabilities are recorded in the IIP as liabilities of the General Government. Additionally, external liabilities of the IPAB (a decentralized agency of the Central Government) are classified as external debt of the other sectors (these liabilities are classified as liabilities of the General Government in the IIP, following the *BPM6* guidelines).

Monetary Authorities. The amount of SDRs allocated to Mexico is not included as a liability of the Monetary Authorities and the deposits with the BM are classified as "other liabilities" (both concepts are recorded in the IIP following the *BPM6* guidelines).

The banking sector corresponds with the deposit taking corporations excluding the central bank in the IIP. External debt liabilities are further disaggregated into three categories: commercial banks, development banks (public banks) and other deposit taking corporations. The coverage of this sector is consistent with the IIP and the monetary statistics.

Debt liabilities between companies in a direct investment relationship (intercompany debt) are not recorded. Additional identification of the liabilities of public corporations, the private sector, and the IPAB is provided.

External debt classified by institutional sector is not directly available on the BM website. The main external debt presentation (table CE101[17]) shows external debt following the "place of issue" and "nationality" concepts consistently with the information provided and disseminated by the SHCP (classified by the four sectors mentioned before) and the total amount of the "adjustment" to apply the residency criterion without any further detail. An additional table (table CE103[18]) shows the adjustment with the detailed amounts that the BM adds and deducts to approximate the information compiled following the criteria of place of issue and nationality to the residency criterion, and the classification by sector. Thus, the classification of external debt by institutional sector is not directly available and users would need to add and subtract the information provided in both tables. A classification of external debt into debt of the public sector (comprising the Federal Government, Monetary Authority, the development banks, the IPAB and other public entities and

17 https://www.banxico.org.mx/SieInternet/consultarDirectorioInternetAction.do?sector=1&accion=consultarCuadro&idCuadro=CE101&locale=es.

18 https://www.banxico.org.mx/SieInternet/consultarDirectorioInternetAction.do?sector=1&accion=consultarCuadro&idCuadro=CE103&locale=es.

corporations) and debt of the private sector (the rest of units) would also need to be calculated by users combining the information in the two tables disseminated by the BM.

The information reported by the BM to the Quarterly External Debt Database of the World Bank (QEDS) following SDDS requirements (Table 1 in the QEDS[19]) comprises the four sectors (general government, central bank, deposit taking corporations (excluding the BM), and other sectors) recommended in the *BPM6* and in the *EDS Guide*. However, the amounts included under General Government include only the debt liabilities of the Federal Government. Following the guidelines of the *BPM6* and the *EDS Guide*, central bank external debt disseminated in the QEDS include the SDRs allocated to Mexico (as mentioned above, these liabilities are not recorded in the external debt disseminated in the BM website). External debt in the QEDSs does not include intercompany debt liabilities, which are also excluded from the information disseminated in the BM website.

Debt liabilities of the public sector are attributed to the institutional sector of the unit that uses the funds borrowed from nonresidents, instead of the sector of the immediate borrower. Following this practice (which is not recommended by the *BPM6/EDS Guide*), if a resident unit of the public sector borrows funds from nonresidents (for example a development bank) and on-lends to another public sector unit that belongs to a different sector (for example a public corporation classified as "other sectors"), the external debt is attributed to the sector of the second unit, that is the "user" of the funds (in the example the "other sectors") instead of the sector of the immediate borrower. In other words, the funds are considered to pass-through the resident borrowing from nonresidents and the external liability is classified as external debt of the resident unit that receives the on-lent funds.

Classification by maturity of liabilities of the public sector in the external debt is based on the term to maturity. Thus, liabilities due to be repaid in one year or less are classified under short-term regardless of the original maturity of the instruments at issuance.

2.4 Basis for Recording

2.4.1 Market Prices are Used to Value Transactions and Positions (for some positions, proxies are used)

Every effort is made to ensure valuation at market prices of transactions in the balance of payments. Adjustments to the information from source data are made in cases where the market price principle is not applied. For example, the prices of oil exports and agricultural product exports is not always recorded on customs declarations. In these cases, oil exports are valued at prices provided by PEMEX and the market price for agricultural products exports are estimated using average markets prices.

IIP positions are valued at market prices in the case of traded instruments in direct investment, portfolio investment, and financial derivatives. When market prices are not available, the market price is imputed using market prices of traded instruments. Corporations' direct investment

[19] https://databank.worldbank.org/embed-int/Table-1-SDDS-new/id/4f2f0c86.

positions that are not traded in public exchanges are recorded at book value for equity and nominal value for debt. Positions in other investment are recorded at nominal value.

In external debt, the liabilities of the public sector reported by the SHCP and the nonfinancial private debt are recorded at face value.

2.4.2 Recording is Done on an Accrual Basis

The compilation of the balance of payments, the IIP, and the external debt statistics follows, in general, accrual basis recording. In the balance of payments, the majority of interest payable and receivable is recorded on an accrual basis. Interest from Treasury Certificates of the Federation (CETES) recorded on a cash basis and the liabilities of commercial banks include interest costs that are not yet payable.

2.4.3 Grossing/netting Procedures are Broadly Consistent with Internationally Accepted Standards, Guidelines, or Good Practices

The balance of payments is compiled on the basis of gross figures for each component of the current and the capital account. The financial account and the IIP record assets and liabilities separately with the exception of financial derivatives that are recorded deducting assets from liabilities.

3. Accuracy and Reliability

3.1 Source Data

3.1.1 Source Data are Obtained from Comprehensive Data Collection Programs that Take into Account Country-specific Conditions

The selection of data sources is determined by statistical considerations, taking account the timeliness and quality of any information available, and the cost and feasibility of gathering additional information to complement the basic sources. As the BM participates in technical committees and working groups with other institutions (INEGI, AGA, SE, Secretariat of Tourism), the sources and methods used to compile the ESS benefit from the exchange of information and methodological discussions that take place in these committees and working groups.

Additionally, the BM has worked together with public and private entities that have under their custody administrative records and run surveys that serve as a fundamental input for the generation of the ESS. The exchange of this information is instrumented through bilateral formal and informal agreements. The BM has access to SHCP information, which is the main source for data on external transactions and positions of the public sector. CONACYT provides the BM with the results of the Survey on Research and Technological Development, which is the source for compiling items in the current and capital account. INEGI provides the BM with the Survey on International Travelers, which is the source to compile travel services. Indeval (central depository of securities) supplies

information on transactions in securities issued in Mexico, and the National Insurance and Surety Commission for insurance services also is a relevant source of information.

Administrative information and surveys available in different areas and departments of the BM are sources to compile different items in the primary income and financial account of the balance of payments and the IIP: the survey "Outstanding Consolidated Claims on Mexico," which is the source for calculating the non-banking private sector's liabilities and related income; the "Survey on Financial Assets, Derivatives and Services," used for estimating several items of the financial account; and the survey "Investment abroad of Mexican residents," for compiling direct investment.

3.1.2 Source Data Reasonably Approximate the Definitions, Scope, Classifications, Valuation, and Time of Recording Required

The BM compiles the ESS on the basis of a mix of information sources. The most relevant are:

Goods are compiled from the declarations that individuals and legal entities submit to the customs authority, the Customs declaration form. The information is compiled in the framework of a Technical Committee with participation from the AGA, the SE and INEGI. Data on goods procured through carriers are obtained from information provided by airports, seaports and transport companies.

Travel credits and debits are obtained by combining data from immigration authorities on the number of arrivals and departures, and a survey carried out by INEGI to estimate the average expenditure per traveler.

Services other than travel are compiled with information collected from the main companies providing and acquiring services to/from nonresidents through a survey conducted by the GAMSR. Data on freight are estimated using information provided by the US Census Bureau; data on insurance services collected from the Surety National Commission; data on financial services provided by financial intermediaries; information provided by CONACYT on telecommunications, computer, information and other business services; data on expenditure and number of employees provided by the US mission in Mexico and by the administrative records on expenditure abroad by Mexican embassies and consulates. Coverage of these services is considered good, and the concepts and definitions approximate the international guidelines. FISIM is compiled by the BM. Manufacturing services on physical inputs owned by others are not recorded (goods related to these services are recorded under general merchandise) and digital services acquired by Mexican households from nonresidents are not estimated.

In the **primary income account**, compensation of employees is compiled using information from a continuous survey in the main cities in the border with the US. Estimates are prepared of the average income of border workers and the number of border crossings. Information to estimate sports player's payroll is also available.

Investment income is compiled from sources on financial transactions and positions and, in some cases, applying market interest rates to IIP positions.

In the **secondary income account**, workers' remittances information is available from money transfer companies that are mandated to report transactions to the BM in standard formats according to a circular issued in 2012. Information on pensions is obtained from international organizations, private foundations, the embassy of the United States, and the Mexican Secretariat of Foreign Affairs. An estimate of secondary income from insurance activity is recorded in the Rest of the World account disseminated quarterly by INEGI, but estimates are not recorded in the balance of payments.

Capital account transactions are compiled from information on transfers of sport players and several administrative sources that provide data on non-produced nonfinancial assets, donations, and non-refundable technical cooperation.

The **financial account** and the IIP are compiled with a mix of different sources: direct investment in Mexico (inward FDI) is obtained from the National Register of Foreign Investment administered by the SE. The BM and the SE maintain close collaboration in this field. Direct investment abroad (outward FDI) is compiled from a BM survey of companies identified as direct investors abroad. This survey also provides information on other financial assets (portfolio investment, financial derivatives and other investment) of the nonfinancial corporations. Information on external assets and liabilities of the BM, the other deposit taking corporations and other financial intermediaries is available in different BM units. The SHCP provides the BM with information about the external financial assets and liabilities of the public sector. These data sources are complemented with regular data on transactions and holdings of nonresident investors in securities issued in the domestic market by Mexican residents, provided by Indeval which is used to estimate portfolio investment. Other sources include data on transactions and positions of foreign branches of Mexican banks with Mexican residents (available at the BM), a survey of foreign creditor banks to identify financing provided to Mexican private companies, and information on trade credits involving Mexican companies listed in the Mexican Stock Exchange.

3.1.3 Source Data are Timely

Source data are available on time for the compilation of ESS. The value of exports of crude oil, which for operating reasons is reported to Customs with a lag, is adjusted based on data from PEMEX. In the case of FDI in Mexico, there are some lags in the quarterly reporting by companies to the Register of Foreign Investment in México of the SE. For this reason, complementary estimates are prepared with information available from other sources or after consultation with the relevant companies (those that have not reported to the Register and may have undertaken significant transactions). As the Register is continually updated by the SE, direct investment transactions and positions are frequently and substantially revised. Similarly, non-financial corporations incur in relatively frequent delays in responding to GAMSR surveys of private nonfinancial companies. GAMSR staff consistently follow up with companies that have not reported data by the deadline

through telephone calls or emails. The response rate of surveys run by GAMSR are adequate (around 79 percent).

3.2 Assessment of Source Data

3.2.1 Source data—Including Censuses, Sample Surveys and Administrative Records—are Routinely Assessed, (e.g., for coverage, sample error, response error, and nonsampling error) the Results of the Assessments are Monitored and Made Available to Guide Statistical Processes

Specific procedures have been created to adjust the source data to improve coverage, classification, and valuation. The goods item is compiled based on information provided by the AGA to the BM at the level of individual transactions. The information is processed and stored in a data base and detailed checks are used to identify atypical transactions. Outliers, at the company, product, or other levels, are analyzed and discussed with AGA staff and, in some cases, with the companies involved in the transactions. Transactions are reported in Mexican pesos and converted by AGA to US dollars. The amounts converted are adjusted when the implicit conversion rates are out of a range set every month. Changes in the methodology and new data needs are discussed in the interinstitutional group with INEGI, the SE and the AGA. A variety of sources are used to compile external trade in services statistics. In the event of atypical or unexpected data, the survey respondents are contacted to confirm or correct the amounts reported.

When interest is reported on a cash basis, implicit interest rates (plus spreads) are confronted with the expected ranges of interest rates. When discrepancies arise, the reporting entity or source is consulted. Direct investment earnings (distributed and reinvested) are validated by the SE under the regulatory framework for the Registry of Foreign Direct investment in Mexico.

Worker's remittances are compiled based on the standardized reports that the companies involved in money transfer are mandated to provide under the circular issued by the BM. The circular includes clear reporting instructions, and when data look atypical or unexpected, the reporter is contacted seeking clarification.

Some primary sources (notably the SHCP regarding the public sector assets and liabilities) provide information on transactions and positions in financial instruments on a place-of-issue basis (securities issued in Mexico and securities issued abroad) or a nationality basis (liabilities against branches of Mexican banks abroad). In such cases, supplementary sources are used to compile financial transactions and position following the residency criterion. When atypical or unexpected values of financial transactions or positions in other investment are observed, the source of the information is contacted to confirm or correct the information.

3.3 Statistical Techniques

3.3.1 Data Compilation Employs Sound Statistical Techniques to Deal with Data Sources

The CIF/FOB adjustment to record freight and insurance in the services account is based on information from the US Census Bureau. Financial intermediation services indirectly measured (FISIM) are calculated separately for loans and deposits and adjustments are included in the primary income account. Trade credit liabilities of the non-financial private sector are compiled from data available from the companies listed in the Mexican stock exchange. As most corporate groups consolidate their financial flows and positions, adjustments are made to identify transactions between Mexican residents and nonresidents.

3.3.2 Other Statistical Procedures (e.g., data adjustments and transformations, and statistical analysis) Employ Sound Statistical Techniques

Basic source data are adjusted to conform to statistical guidelines, when needed. For some agricultural products, at the time of the export, exporters do not know the price at which the goods will be sold. In these cases, values declared to the Customs Authorities do not reflect the transaction prices and are adjusted by applying the reported US import prices from Mexico for these products. Information provided by the US diplomatic mission in Mexico are used to extrapolate the expenditure of the other diplomatic missions accredited in Mexico, based on the number of diplomatic personnel in Mexico, provided by the Secretariat of Foreign Relations.

When primary income related to other investment (assets) of the nonfinancial private sector is not available in the source data, it is estimated by applying adjusted international market interest rates to the positions. Direct investment income is based on the records of the direct investor in the case of outward direct investment, and on the records of the direct investment enterprise in the case of inward direct investment. Cash carried migrant workers when returning to Mexico (worker's remittances) are estimated from the Travel survey, which includes specific questions on this issue.

Bloomberg news service reports and information provided directly to the BM's Directorate General of Central Bank Operations by the issuer companies are used to validate issuance of bonds and notes and other high-value securities by the nonfinancial private sector. Some transactions of the nonfinancial private sector in other investment are compiled as the difference between the positions at the beginning and at the end of each period. In these cases, when information is available, exchange rate and other price changes are identified and excluded from the transactions. Public sector liabilities are free of this valuation effect, as the SHCP calculates and reports exchange rate and other price changes separately from transactions.

3.4 Assessment and Validation of Intermediate Data and Statistical Outputs

3.4.1 Intermediate Results are Validated Against Other Information Where Applicable

A close relationship is established between the BM and the main sources of information for the compilation of the ESS. Any data whose level or behavior does not conform to what is expected or considered reasonable, is verified with the respective source.

3.4.2 Statistical Discrepancies in Intermediate Data are Assessed and Investigated

Statistical discrepancies in the intermediate data are regularly assessed and investigated. In the case of merchandise trade, the system flags unit values that fall out of the typical range in any category. Also, outliers in each category, or at the level of resident units are verified with Customs or with the unit itself. Although the statistics on international trade are published approximately 27 days after the end of the reference month, the AGA provides the BM with customs reports at a higher frequency. This allows the BM to validate the information and check atypical data before disseminating the main aggregates. Similarly, the availability of the number of non-border travelers registered electronically each month allows the BM to estimate in advance the trend of total credits and debit in the travel item and to validate the results of the survey published by INEGI.

3.4.3 Statistical Discrepancies and Other Potential Indicators of Problems in Statistical Outputs are Investigated

Several basic contrasts are made between ESS and other relevant economic indicators, with the aim of ensuring consistent statistics. The Mexico-US bilateral discrepancy in merchandise trade is closely followed and the main reasons for the discrepancies have already been identified. The size and sign of the errors and omissions is regularly monitored. High amounts or a persistent positive/negative sign over several periods are subject of special attention in order to identify possible improvements in compilation procedures or the need to implement new sources of information.

3.5 Revision Studies

3.5.1 Studies and Analyses of Revisions and/or Updates are Carried and Used Internally to Inform Statistical Processes

The first release of the ESS is always considered preliminary since reviews are continuously carried out to guarantee the highest possible coverage and quality. Most revisions are related to late response by nonfinancial private companies to BM surveys and new or corrected information introduced by the SE in the Register of Direct Investment. When such revisions are carried out, a message is published as a footnote in the press release or statistical table. The direction and size of the revisions between the preliminary and final data are examined. The size and sign of the errors and omissions provide the frame of reference for the investigation of deficiencies. Although the direction and size of the revisions between the preliminary and final data are examined, formal studies are not conducted to inform statistical processes. In the case of major revisions in sources, consultations take place to identify the reasons for the revision.

4. Serviceability

4.1 Periodicity and Timeliness

4.1.1 Periodicity Follows Dissemination Standards

The periodicity of the balance of payments statistics meets SDDS requirements. Quarterly and annual data are compiled and disseminated for the BOP, IIP and external debt.

4.1.2 Timeliness Follows Dissemination Standards

The quarterly balance of payments is disseminated on the 25th day of the second month after the end of reference quarter. The IIP and external debt are disseminated one quarter after the reference period, meeting the SDDS requirements.

4.2 Consistency

4.2.1 Statistics are Consistent Within the Dataset

The balance of payments is compiled and published on a quarterly basis. Annual and quarterly data are fully consistent. The IIP is released quarterly and annually, and at the time the annual data is released, the previous quarters are reviewed, so all data sets are consistent. The external debt is disseminated on a quarterly basis. Errors and omissions are regularly monitored by the GAMSR to identify improvements necessary in the information sources or in the compilation system, as well as transactions that may not have been captured. The results of this analysis have led to the introduction of new surveys aimed at increasing the quality of the data collected on services, external financial assets of the non-financial private sector, and financial derivatives.

The annual IIP data includes an integrated statement with the reconciliation of beginning and ending positions, balance of payments transactions, and other flows (exchange rate changes, other price changes, and other changes in volume). The sign and the size of other flows is monitored regularly to verify their consistency with the evolution of exchange rates and the prices of financial assets during the period. Consistency between the IIP and external debt should be enhanced by harmonizing the classification of transactions and institutional sectors, the valuation methods, and by including in the external debt the debt liabilities that are not currently recorded, notably the external debt liabilities related to direct investment (intercompany debt) and the allocated SDRs. Disseminating consistent data to allow users to establish correspondence between both data sets would be essential.

The balance of payments and the IIP are consistent with related detailed statistics disseminated by the BM (merchandise trade, tourism statistics, remittances, statistics of foreign direct investment in Mexico, operations and positions of non-residents in securities issued by Mexican residents). ESS disseminated by BM are consistent with the information submitted to the IMF on balance of payments and IIP and to the WB on external debt statistics. However, the balance of payments and

the IIP reported to the IMF for re-dissemination include several items in the current and financial account that are not available in the national presentation. Moreover, the presentation of institutional sectors in the financial account and the IIP follows a national terminology that mixes the balance of payments institutional sectors and the public/private classification. This presentation makes it difficult to compare the data included in both data sources.

As presented in the BM website, external debt is organized by instrument and institutional sector and is difficult to reconcile with the IIP and the QEDS database on the WB website. Elucidating composition by sector requires combining information included in two different tables that are not harmonized as regards institutional sectors and instruments.

4.2.2 Statistics are Consistent or Reconcilable Over a Reasonable Period of Time

Homogeneous data series for the balance of payments, following the *BMP6* guidelines, are available since 2006. Additionally, data series following the *BPM5* presentation are available since 1980. The GAMSR continues updating the quarterly balance of payments based on the *BPM5* simultaneously with the *BPM6* quarterly figures. Although this update of the *BPM5* series is used by certain analysts, studies that use *BPM5* series might give rise to confusion. Quarterly historical series are also available since 1950. When changes are made to source data, methodology, or techniques, historical series are reconstructed as far back as reasonably possible. The IIP data series following the *BPM6* guidelines are available annually since 2002 and quarterly since 2009. External debt data series are available quarterly since 2002.

4.2.3 Statistics are Consistent or Reconcilable with Those Obtained Through Other Data Sources and/or Statistical Frameworks

The current and capital accounts in the BOP and in the quarterly sectoral accounts compiled by INEGI are largely consistent, as the BOP data are the main source for the rest of the world account. However, a comparison of financial account transactions and positions shows significant differences between both data sets. The standard presentation of both financial transactions and positions is different in the balance of payments and the IIP (based on the functional categories) and in the rest of the world account (based on financial instruments) making it difficult to identify the reasons for the discrepancies. It is important to maintain consistency between both statistics and to identify and, as far as possible, explain the discrepancies to users.

BOP data on goods are reconciled with international merchandise trade data, and the travel statistics disseminated by INEGI. Data on international merchandise trade, travel, and the BOP are disseminated according to publication schedules that generally feature different release dates for each statistic. International trade on goods and travel statistics are published on a monthly basis and are disseminated before the quarterly balance of payments. The dissemination of direct investment in Mexico by the SE is coordinated with the dissemination of the ESS by the BM. Dissemination of data on the BOP financial account and the IIP is consistent with the release of money and banking statistics. The external public debt data compiled by the SHCP are used as a source to compile the external debt statistics prepared by the GAFP.

4.3 Revision Policy and Practice

4.3.1 Revisions and/or Updates Follow a Regular and Transparent Schedule

The BM has not published a revisions policy for the ESS. Revisions are carried out for the quarterly publication of the BOP, the IIP and the external debt. The balance of payments press release incorporates a note communicating the main revisions in each quarter. In the case of the IIP, the statistics does not include notes to notify users about the nature of the revisions. As for external debt, tables include an appropriate footnote to specify that data are preliminary. Whenever any major change is made to the data or to the methodology, explanatory notes are included.

4.3.2 Preliminary and/or Revised/updated Data are Clearly Identified

4.3.3 Studies and Analyses of Revisions are Made Public

There are no formal studies or analyses of the revisions, thus no documentation is published.

5. Accessibility

5.1 Data Accessibility

5.1.1 Statistics are Presented in a way that Facilitates Proper Interpretation and Meaningful Comparisons (layout and clarity of text, tables, and charts)

In general, the accessibility of the statistical information on the BM website is adequate. Tables are presented for the main components, and data series can be downloaded in different formats with options for the degree of detail and periodicity. For each item, a graphic can be displayed, which facilitates a quick analysis of the information. An API facilitates the automation of the process of extraction of the statistical information.

The balance of payments is disseminated quarterly on the website of the BM. The information is presented in summary tables with the main components of the current account, the capital account and the financial account. Homogeneous historical series, with the *BPM6* methodology, are available since 2006. These data series can be downloaded in different formats and with different degrees of detail. Graphs are easily accessible for each of the BOP components. Additionally, detailed tables of the current account and its main components are published in absolute value and in relation to GDP. Along with the BOP, related statistical products are disseminated to provide greater detail on several concepts: merchandise trade, tourism, remittances, foreign direct investment in Mexico, and operations and positions of non-residents in securities issued by Mexican residents.

The dissemination of the balance of payments is accompanied by a press release that describes the main trends in the most recent period. Additionally, in the annual and quarterly reports of the BM, the evolution of the foreign sector is analyzed in the context of the broader economy.

The IIP data series following the *BPM6* guidelines are available annually since 2001 and quarterly since 2009, but data dissemination is not accompanied by a press release. External debt data series are also available quarterly since 2002. The results of the surveys of the users of macroeconomic statistics conducted during the ROSC exercise showed a lower degree of knowledge of IIP and external debt than that for other statistics. The dissemination of press releases with quarterly, or at least annual data as well as detailed metadata and explanatory notes of the basic concepts on which these statistics are based could improve awareness and use of these data among national users.

5.1.2 Dissemination Media and Formats are Adequate

Formats used for disseminating the ESS, like the rest of the BM's statistics, are suitable for electronic dissemination via the Internet. Data series are easily downloadable in different formats with the possibility of using an API to automate the process of extraction of the statistical information.

5.1.3 Statistics are Released on a Preannounced Schedule

A data release calendar can be found on the BM website. However, this calendar does not include all the dates for the dissemination of the ESS. A release calendar for the dissemination of the balance of payments, the IIP and the external debt is available in the NSDP.

5.1.4 Statistics are Made Available to All Users at the Same Time

ESS are disclosed simultaneously to all users via the BM website, and in the case of the BOP, accompanied with a press release. Prior access to the data by the press or government agencies is not granted.

5.1.5 Statistics not Routinely Disseminated are Made Available upon Request

Information is provided to those who request information not classified as confidential and not included in the tables provided on the website. The BM informs users how make requests for statistics not routinely disseminated via the BM website. The BM keeps records of the requests received and uses this information to improve ESS dissemination.

5.2 Metadata Accessibility

5.2.1 Documentation on Concepts, Scope, Classifications, Basis of Recording, Data Sources, and Statistical Techniques is Available, and Differences from Internationally Accepted Standards, Guidelines, or Good Practices are Annotated

For the BOP, IIP,[20] external debt statistics,[21] and related statistics disseminated by the BM

[20] http://transparencia.banxico.org.mx/documentos/%7B3B39846A-E328-0E1B-05B4-AE510EDD5850%7D.pdf.

[21] https://www.banxico.org.mx/apps/sie/%7B28CC3F7F-3BB8-C6EF-4332-C847BDC76E59%7D.pdf.

(international merchandise trade,[22] remittances,[23] travel,[24] direct investment in Mexico[25]) metadata are available on the BM website, in a document accessible next to the link of the statistical tables and in the Transparency portal. Metadata can also be consulted on the IMF's International Dissemination Standards Bulletin Board (DSBB). The methodological documents published on the BM website for the BOP and IIP only include a brief methodological reference describing the content of each heading in terms of the *BPM6*. More detail is needed on sources and methods for both statistics. In the case of the external debt, the methodological note needs to be updated.

5.2.2 Levels of Detail are Adapted to the Needs of the Intended Audience

The BM only makes basis metadata available to its users. The BM should update its metadata and provide detailed information about the sources and methods for each component of the Balance of Payments and International Investment Position.

5.3 Assistance to Users

5.3.1 Contact Points are Publicized

Support and advisory assistance are provided to users on request, including owing to the Transparency Law. Staff of the BM responds promptly to these requests. Such support is not advertised in any of the available media. Balance of payments and external debt contact information can be found on the Mexico SDDS website.

5.3.2 Publications, Documents, and Other Services, Including Information on Any Charges, are Widely Available

Indexes of publications, documentation, and research papers are categorized, listed, and available on the BM's website free of charge.

IMF Staff Recommendations

- Consult with data users, at least annually, regarding the quality and relevance of ESS. (0)
- Publish the terms and conditions under which ESS are compiled and disseminated. (1)
- Establish and disseminate a revision policy, and conduct and publish revision studies. (3,4)
- Ensure consistency in the valuation of debt securities at market prices, recording interest following the accrual principle, and use original maturity to classify debt instruments across the ESS. (2)

[22] http://transparencia.banxico.org.mx/documentos/{10ABFBD2-D74D-D0E7-3E34-C3A2013E83F5}.pdf.

[23] http://transparencia.banxico.org.mx/documentos/%7BA25165A6-17D2-7401-547D-0D1983A7DE0E%7D.pdf.

[24] http://transparencia.banxico.org.mx/documentos/{96DEF2CC-340A-562B-8E72-BE169602D2E4}.pdf.

[25] http://transparencia.banxico.org.mx/documentos/{E69AEE70-EC27-678E-43E2-A31200CBAEFD}.pdf.

- Consistent with the recommendations for the national accounts program, within the governance structure of the SNIEG and in coordination with the US and Canadian compilers, develop experimental estimates of manufacturing services on physical inputs owned by others. Once these estimates are of sufficient quality, in coordination with major trading partners, implement the BPM6 recommendation. (2)
- There is a need to reinforce the authority of the BM to collect statistical information from the nonfinancial private sector. This would require a legal framework that clearly establishes the mandatory reporting of data to the BM for the compilation of ESS, or joint INEGI-BM procedures to conduct surveys under the authority of the Statistical Law.
- In the framework of the SNIEG committees and working groups, establish a plan to compile data on digital services acquired from nonresidents by the households. This plan should ensure the provision to the BM of fiscal data on digital services, information of credit/debit card transactions, and any other information required to produce an accurate estimate.
- In cooperation with INEGI, compile transactions in the secondary income and financial account related to insurance services. (2)
- Revise the external debt compilation process to enhance adherence to guidelines in the BPM6 and the EDS Guide, and ensure consistency with the IIP. (3)
- Disseminate external debt following the presentations established in the Guide, with bridging tables between the external debt published by the BM and the public external debt disseminated by the SHCP. (4)
- Disseminate the balance of payments and the IIP with a structure (institutional sectors and financial instruments) consistent with the standard components of the BPM6, including additional details relevant for the Mexican economy, if needed. (4)
- Consider the costs and benefits of discontinuing the publication of the *BPM5* series, taking due account of users' feedback. (4)
- Disseminate a release calendar covering all external sector statistics, including the IIP and external debt. (1)
- Expand the information provided about metadata in the methodological notes for the balance of payments and the IIP and update the methodological note for the external debt statistics. (5)
- Disseminate press releases for the IIP and external debt statistics, to better promote use of these data among users. (5)

Table 3. Mexico: Data Quality Assessment Framework (June 2021): Summary of Results for Balance of Payments, IIP and External Debt

(Compiling Agency: Bank of Mexico)

Key to symbols: NA = Not Applicable; O = Observed; LO = Largely Observed; LNO = Largely Not Observed; NO = Not Observed; SDDS = Complies with SDDS Criteria[1]

Element	NA	Assessment				Comments
		O	LO	LNO	NO	
0. Prerequisites of quality						
0.1 Legal and institutional environment			X			BM is not empowered by the Law to require reporting by the nonfinancial private sector.
0.2 Resources		X				
0.3 Relevance			X			BM does not have a formal and systematic process of consultation with private sector users.
0.4 Other quality management		X				
1. Assurances of integrity						
1.1 Professionalism		X				
1.2 Transparency		X				
1.3 Ethical standards		X				
2. Methodological soundness						
2.1 Concepts and definitions			X			External debt is compiled based on the previous edition (2003) of the EDS Guide.
2.2 Scope		X				
2.3 Classification/sectorization			X			Cross-country comparability of the BOP and IIP is hindered by the use of national classifications and presentations that mix institutional sectors and public/private concepts. Classification and sectorization of the external debt use a mix of the last and previous editions of the EDS Guide. Intercompany debt and allocation of SDRs are not classified as external debt, and on-lent funds between public units are attributed to the sector of the "final user" of the funds.
2.4 Basis for recording			X			Public sector and nonfinancial private sector debt are recorded at face value and interest on public sector financial assets and liabilities is recorded on a cash basis.

[1]**Observed:** Current practices generally meet internationally accepted statistical standards without any significant deficiency. **Largely observed:** There are some departures, but these are not seen as sufficient to raise doubts about the broad observance of standards. **Largely not observed:** Current practices deviate significantly from standards, and major remedial action is required. **Not observed:** Most current practices deviate from standards. **Not applicable:** Used only exceptionally when standards do not apply to a country's circumstances.

Table 3. Data Quality Assessment Framework (June 2021): Summary of Results for Balance of Payments, IIP and External Debt (concluded)						
3. Accuracy and reliability						
3.1 Source data			X			Source data are incomplete to compile some services, particularly digital services, in the current account.
3.2 Assessment of source data		X				
3.3 Statistical techniques		X				
3.4 Assessment and validation of intermediate data and statistical outputs		X				
3.5 Revision studies			X			Formal studies are not conducted or published.
4. Serviceability						
4.1 Periodicity and timeliness		X				
4.2 Consistency			X			Consistency between IIP and external debt needs to be enhanced. Differences between transactions in the financial account of the BOP and IIP positions and the national accounts need to be clarified.
4.3 Revision policy and practice			X			There is no formal revisions policy.
5. Accessibility						
5.1 Data accessibility			X			IIP and external debt statistics are not included in the advance release calendar maintained by the BM.
5.2 Metadata accessibility			X			More detailed metadata and updates (particularly in the case of the external debt) are needed.
5.3 Assistance to users		X				